10 GLOBAL CHALLENGES FOR SOCIAL SECURITY
Developments and innovation 2019
ACKNOWLEDGEMENT

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The report benefitted from comments from Marcelo Abi-Ramia Caetano, Jens Schremmer and others.

Dominique La Salle
Director, Social Security Development
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The power of the International Social Security Association (ISSA) lies with our strong membership base in over 150 countries and also with our unique capacity to identify and assess global developments in social security policy and administration.

As a global community, the ISSA is strengthening its presence and capacities to promote social security. As we do so, our Association must act locally as well as globally. Locally, by better tailoring our knowledge and services to the needs of member institutions. Globally, through the unique valued-added that we bring in identifying and disseminating practical knowledge about how to achieve excellence in social security administration.

Our Association is committed to further extending social security protection in line with the objectives of the United Nations Sustainable Development Goals for 2030. To do so, to positively transform lives, we require improved levels of knowledge and analysis. We need to better understand the challenges and identify appropriate responses.

This global report is part of our response. It concludes the programme of research that we launched in 2016.

Across the ISSA regions, there are differences in priorities as regards addressing the challenges. Irrespective of ranking, each challenge requires urgent attention. The many submissions to the ISSA regional Good Practice Awards reveal that innovative responses exist. How our Association can further develop and share innovations, good practices and solutions will be a chief discussion point at the 2019 World Social Security Forum in Brussels.

I hope that you will find this report stimulating and inspiring, and that it will further strengthen your engagement in our unique Association.

Marcelo Abi-Ramia Caetano  
Secretary General
INTRODUCTION

This report, Ten Global Challenges for Social Security 2019 – Developments and Innovation, brings to a conclusion the global research project launched by the International Social Security Association (ISSA) in 2016. Across this triennium, regional follow-up reports focused on Africa, the Americas, Asia and the Pacific, and Europe have provided important feedback from ISSA member institutions.

ISSA member institutions were surveyed to identify the most significant internal and external challenges they face in respect of the ten global challenges, with a special focus on the emerging digital economy. The survey responses confirm not only the need to ensure effective access to sustainable social security protection across the life course but underline the expectation that this should be achieved through modern, user-centric administration.

Framed by the international objectives of the United Nations Sustainable Development Goals for 2030, and despite improvements in legal coverage in a great many countries, some population groups still do not have effective access to adequate coverage. The needs of young workers in the transition from education to the world of work is a difficult challenge. Responses require coordination across labour market institutions, education and vocational training bodies, as well as social security institutions. Continuous skills development and the need for gendered responses should be considered, and to deal with the needs of formal migrant workers, social security systems have different unilateral, bilateral and multilateral responses at their disposal. Globally, the heightened risk of external shocks and extreme events is leading social security systems to adjust to consider risk more broadly.

THE IMPACTS OF THE DIGITAL ECONOMY ON SOCIAL SECURITY

ISSA member institutions provided survey responses concerning the impacts of the digital economy on their social security systems. The new forms of work clearly generate opportunities, but concerns related to a weakening of coverage and decreased levels of contributions are specific issues to be addressed. While new professions and job tasks will be created, others will be lost. Overall, this may lead to a weakening of collective workers’ rights, occupational safety and health regulations and contributory social security programmes. Of necessity, greater attention will have to be given to the complementarity of tax-financed universal schemes and contributory schemes.

The important shift associated with the emerging digital economy, alongside concurrent global demographic changes and concerns about inequalities and social cohesion, create a degree of urgency about realizing the international goal of universal social security protection.

The portability of social security has emerged as perhaps the most important strategic enabler to provide life-long, dynamic, innovative and cost-effective social security to all while satisfying public expectations for service quality. To that end, improved coordination...
amongst institutions and governments is of critical importance, supported by new technology, the standardized exchange of information and enhanced data protection.

Innovation is what is needed to make this a reality. Yet innovating is risky. Its pursuit requires an intelligent mix of leadership, human capital and technology. The ISSA is committed to support the drive to innovate and to disseminate innovations and best practices. This global report is part of that effort along with the practical tools, knowledge and services provided to members of our Association.

Each chapter of this report addresses one challenge only, allowing the reader to quickly access the information of interest. All chapters are structured to first present the broader context, to then explain the nature of the challenge for social security systems, to offer concrete good practice examples of how ISSA member institutions are innovatively responding to the challenge and to conclude with key messages. Each chapter is supported by data infographics.
CHALLENGE 1

Health
Health and long-term care

The health and long-term care risks and challenges facing social security and health care systems continue to evolve worldwide. In spite of improvements in health indicators, inequality in health outcomes remains a challenge. Globally, life expectancy has increased and the population is ageing, but the pace and extent of this process is uneven. In terms of health outcomes, the extra years of life gained are not all lived in good health. To further improve health indicators, health-related challenges must be correctly anticipated, proactive and preventive responses put in place and appropriate benefits and services provided. This poses a considerable challenge as the population of frail seniors is increasing rapidly and requires an urgent renewed emphasis on ageing-in-place policies.

Improvements in education, socio-economic conditions and lifestyle, as well as progress in healthcare and medicine have contributed to various improvements in global health. However there has been an uneven distribution of these gains among populations, including a continuing difference in mortality rates by sex across age groups, and disparities in outcomes across countries. The global average for healthy life expectancy is around 63 years, but this masks large differences reported across countries. In 2017, the leading global risk factors for early death and disability were high blood pressure, smoking tobacco and high blood sugar. Overall, noncommunicable diseases contributed to 73.4 per cent of deaths in 2017, while communicable, maternal, neonatal, and nutritional causes accounted for 18.6 per cent, and injuries 8 per cent.

Maternal, infant and child health indicators display major gains globally. In high-income and upper-middle-income countries, more than 90 per cent of all births benefitted from skilled
birth attendance. In several low-income and lower-middle-income countries, less than half of all births were assisted by skilled health personnel. In 2015, an estimated 303,000 women worldwide died during pregnancy and childbirth, the majority in low- and middle-income countries. The infant mortality rate has declined worldwide to 29 deaths per 1000 live births in 2017. The under-5 mortality rate has also decreased but remains a challenge in Africa in particular. The leading causes of death for children younger than age five are pneumonia, diarrhoea and prematurity, while those for infant mortality include preterm birth complications, intrapartum-related events, sepsis or meningitis, and congenital abnormalities.

CHALLENGES FOR SOCIAL SECURITY AND HEALTH CARE SYSTEMS

New enemies in noncommunicable diseases (NCDs). In 2016, NCD-related premature deaths and disabilities led to a loss of about 1.6 billion potential years of healthy productive life. Among people aged 30–69, over 15 million premature mortalities are attributed to chronic diseases annually, with around 85 per cent of these in lower-income countries. Eighty per cent of these premature deaths are attributed to cardiovascular diseases, cancers, respiratory diseases and diabetes. People of all age groups and regions are vulnerable to NCD risk factors, important among which are smoking tobacco, the harmful use of alcohol, low levels of physical activity and an unhealthy diet.

Old enemies in communicable disease. The global burden of communicable diseases has declined, although at varying rates. In 2017, there were around 36.9 million people living with HIV globally, of which 25.7 million in Africa. An estimated 940,000 people died of HIV-related illness globally in the same year. Africa remains the region most heavily impacted by HIV, with an incidence rate of 1.22 per 1000 uninfected population in 2017. Despite progress, tuberculosis (TB) remains a high-burden disease. In 2017, TB caused around 1.3 million deaths in addition to another 300,000 deaths among HIV-positive people. Globally, although TB incidence has declined, drug-resistant TB is a threat. In 2017, 558,000 people developed TB that was resistant to the most effective first line drug. Of these, 82 per cent had multidrug-resistant TB.

The unprecedented global gains in malaria control have stalled, owing to factors such as a lack of sustainable funding, armed conflict in malaria endemic zones and mosquito resistance to insecticides. In 2017, there were approximately 435,000 malaria-related deaths worldwide. Despite vaccinations being a major public health achievement of the twentieth century, progress in eliminating some infectious diseases is under threat. Anti-vaccination movements and public distrust have contributed to a fall in vaccination rates in some countries.

Healthcare systems. At least half of the world’s population do not have access to essential healthcare services. Catastrophic health expenditures push around 100 million people into extreme poverty each year. Investment in health infrastructure varies considerably between countries, as do the strategic objectives of national healthcare systems. Healthcare systems tend to be generally curative-care focused with relatively less attention paid to prevention and health promotion. In Asia and the Pacific, systems tend to be fragmented and hospital-centric with weak primary healthcare.

Health financing. High-income countries account for 80 per cent of global health spending, but represent only 20 per cent of the world population. In 2016, global expenditure on health was 7.5 trillion US dollars (USD), representing close to 10 per cent of global GDP. The average per capita health expenditure was USD 1,000, but one in every two countries spent less than USD 350 per person. At the extremes, some countries spent USD 5,000 or more per person on health in 2016, others spent less than USD 30 per person. Out-of-pocket spending is slowly declining across regions as a share of current total health expenditure.

Of total spending in 2016, public health expenditures represented USD 5.6 trillion. Average figures show an increase in public spending per capita in higher-income countries. In low-income countries, public health spending has fluctuated. It increased over 2000–2004, decreased from 2004–2012 and began to
rise again in 2013. In 2016, average public spending on health per capita was about USD 9. External aid represents less than 1 per cent of global health expenditure and is a small and declining proportion of health spending in middle-income countries. For low-income countries, external aid is increasing.

**Accessibility and effectiveness.** Accessibility varies according to national context and specific areas of the healthcare system. Globally, at least 400 million people do not have access to essential healthcare. More work is required to realize universal health coverage (UHC). For healthcare service effectiveness, there have been improvements in aspects of the quality of healthcare, for example with regard to cancer survival rates. In other areas, progress has been slow and uneven, such as reducing costs associated with medication errors. In lower-income countries, around 40 per cent of healthcare facilities lack improved water supplies and nearly 20 per cent lack sanitation.

**Human resources for health.** Around half of all countries employ the numbers of healthcare workers required to deliver quality healthcare (30 physicians, 100 nurses or midwives, and 5 pharmacists per 10,000 people). But acute shortages and the inequitable distribution of skilled health workers present a constraint in many countries. In 2015, the estimated global health workforce shortage was 10.3 million workers. The shortage of health professionals is most pronounced in countries across sub-Saharan Africa, Southeast Asia, and South Asia.

**Public health emergencies.** With improved mobility, infectious diseases can spread rapidly, and effective responses require preparedness, surveillance and prevention. Yet, most countries lack such preparation. The Ebola outbreak in 2014–16 underlined how existing health infrastructure may not be able to contain health emergencies. Disease outbreaks often happen when communities are vulnerable, for instance following flooding (cholera in Mozambique) or armed conflict (cholera in Yemen). Other public health challenges include mental health issues, substance use (such as opioid dependence), antimicrobial resistance, and exposure to poor air quality.

**RESPONSES TO ADAPT HEALTH AND CARE SYSTEMS**

Health is a major element of the 2030 Sustainable Development Goals (SDGs) agenda, with one comprehensive goal – SDG 3: “Ensure healthy lives and promote well-being for all at all ages”. To meet the goal’s 13 targets, all countries should address current challenges and adapt to subsequent changes in healthcare needs. ▶▶
Health system reform. Many countries are seeking to achieve UHC by reforming their systems to ensure access to quality health services that do not impose financial hardship. Over 30 developed countries have healthcare systems with universal access, and reforms in many less developed countries are moving towards UHC. Demonstrating that UHC is not a characteristic of more developed economies alone, China, Colombia, Mexico, Rwanda and Thailand have also made significant progress towards UHC.

Achieving the 2030 SDG health targets will require new and increasing financial investments. To diversify domestic sources, many countries have introduced health financing reforms to strengthen health systems and enhance access to healthcare. The Philippines introduced a sin tax in December 2012, which has helped extend access to an additional 14 million families. Other approaches seek to reduce inefficiencies, to prevent administrative and clinical errors, and to improve the quality of all services in the healthcare system.

As a step towards UHC, some countries have opted to reform their health system by expanding primary healthcare. Brazil took this path in the 1980s, creating a Unified Health System (Sistema Único de Saúde – SUS), which is now considered the largest universal, free-of-charge, public health system in the world, serving around 160 million people. Some countries use conditional cash transfer programmes, requiring, inter-alia, vaccinations and doctors’ visits, to improve health impacts among the poorest population and overcome financial barriers to accessibility. In Mexico, such a programme has shown positive effects, especially among infants younger than 6 months of age in the poorest households. Nicaragua’s cash transfer programme is associated with a decrease in the prevalence of underweight children younger than age five.

Other countries have opted to tackle the root causes of public health challenges. Since 2012, Armenia has embarked on a project to improve public health through sustainable water management, access to safe water and adequate sanitation. Canada presents an example of adapting the healthcare system to an emerging public health need. To meet the healthcare needs of nearly 55,000 Syrian refugees coming from a zone of armed conflict, all refugees received temporary coverage for healthcare benefits while awaiting access to the provincial or territorial health insurance available to Canadian citizens.

Long-term care (LTC). Growing numbers of frail elderly people, as well as rising incidence rates of NCDs, are driving higher demand for tailored healthcare services, products and infrastructure. Looking at the regional distribution of older people aged 65+, Asia and the Pacific is the region with the highest share with 53 per cent of the world total, followed by Europe (23 per cent), the Americas (17 per cent), and Africa (7 per cent). National responses to the growing needs for LTC services vary.

A few countries have LTC social insurance programmes, such as Germany, Israel, Japan, the Republic of Korea, Luxembourg and the Netherlands. More commonly, there is no legal coverage for LTC insurance, pushing demand towards informal care, social assistance and, for those with greater personal wealth, private LTC insurance.

With a global shortage of around 13.6 million LTC workers, close to 50 per cent of the population aged 65+ have unmet needs for LTC, with marked inequalities between regions. The greatest unmet demand for LTC workers is in Asia and the Pacific, where there is an estimated shortage of 8.2 million workers. Some countries allocate hospital beds for LTC, such as the Czech Republic, Estonia, Finland, Hungary and Spain. Establishing sustainable LTC programmes is now under consideration in many countries, especially in Europe. An ageing-in-place model is increasingly viewed as a strategic requirement for an ageing population. This seeks not only to reduce the use of healthcare facilities and limit the use of institutional care but to realize measurable quality improvements in the care received.

Technology and health. The use of information and communication technology (ICT) in the healthcare sector is expanding. Access to medical technology for diagnosis and treatment has increased rapidly, particularly for CT scanners and MRI units. The prevalence of eHealth is growing with countries establishing a national eHealth policy or strategy to regulate the use of ICT in the health sector by means of ethical frameworks, funding strategies and education.
INNOVATION: THE HEALTH BENEFITS OF HOME CARE, PREVENTION AND EHEALTH

Home care service for elderly stroke patients. Indonesia’s population is ageing with healthcare costs rising, including for chronic disease management such as stroke. To meet the needs of such patients in a more efficient and effective manner, BPJS Kesehatan piloted a home care service for elderly stroke patients. After performing an evidence-based comparison with the existing system of outpatient hospital visits, and a cost–benefit analysis of services, the results suggest that to treat elderly stroke patients at home was more efficient. Quality measurements of home care were also better than those for hospital care.

Health screening programme. Malaysia is experiencing an increase in NCDs, and this is reflected in an increase in the number of claims made for disability and survivors’ pensions. In response, the Social Security Organisation (SOCSO) launched the SOCSO Health Screening Programme, providing free health screening to all eligible insured persons aged 40 or older. The service is provided via health screening vouchers, which include clinical consultation and examination for cardiovascular disease risk factors, and cervical and breast cancers. Epidemiological analysis has shown the benefit of the programme for people and helped identify where to improve programme implementation.

Rolling out a telemedicine system. France is rolling out a telemedicine system. This facilitates remote medical examination via a videoconference platform, particularly for people in rural or other geographically-remote areas with limited access to healthcare. The service permits tele-consultation by physicians, normally through the attending doctor. Tele-consultations use a secure platform to ensure medical confidentiality. France is also seeking to generalize the use of electronic prescriptions in 2019. The electronic prescription, “e-prescription”, is being piloted and provides the patient with a digital QR (Quick Response) code at the end of the consultation. This code is then presented to the pharmacy to receive the prescription.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Many countries are undergoing healthcare system reforms deploying various approaches to achieve UHC, to improve the quality of primary, curative and preventive services across the life course, and to ensure financial sustainability.

Improvements in health indicators are often unevenly distributed and despite progress in many countries towards UHC at least half of the world’s population does not have full access to essential healthcare services, and about 100 million people annually are pushed into extreme poverty due to healthcare payments. Reducing the role played by out-of-pocket expenditure should be a priority.

Realizing improvements in health financing should involve not only seeking new sustainable sources of finance but also should make better use of existing financial resources, staff, infrastructure and technology.

To effectively address national public health challenges there is a strategic need to consider the international dimension, for instance as regards outbreaks of emerging and re-emerging infectious diseases, natural disasters, armed conflicts, pollution and climate change.
GLOBAL PROGRESS AND CHALLENGES

~50%
The number of child deaths has almost halved since 1990
Source: WHO (2015)

13.6 million
Global shortage of formal long-term care workers
Source: ILO (2019)

10,000
Thousands die every day for want of access to affordable health care
Source: Oxfam International (2019)

MAJOR RISK FACTORS IN PREMATURE DEATH

Tobacco smoking
Alcohol consumption
Physical inactivity
Unhealthy diet
Air pollution
Source: WHO (2019)

NONCOMMUNICABLE DISEASES

>70%
NCDs are collectively responsible for the majority of deaths
Source: WHO (2019)

17.9 million
Number of deaths caused by cardiovascular diseases annually
Source: WHO (2018)

9 million
Number of deaths caused by cancer annually
Source: WHO (2018)
CHALLENGE 2

Coverage extension
Closing the coverage gap

The global challenge of social security coverage extension is presented foremost as the goal of extending, at least, basic social security protection to all. This international objective is framed by the United Nations Sustainable Development Goals for 2030. Global progress in this regard continues. As a parallel challenge, the threat of the declining adequacy of some aspects of coverage has risen on the policy agenda. A number of factors lie behind this, including public finance constraints, domestic political agendas about the role of the State, demographic ageing, and the transformation of national and global labour markets associated with the continuing shift towards the digital economy.

The International Labour Organization (ILO) reports that the proportion of the global population with effective access to at least one social security benefit varies from region to region, ranging from 84.1 per cent in Europe and Central Asia, to 67.6 per cent in the Americas, 38.9 per cent in Asia and the Pacific, and 17.8 per cent in Africa. An estimated 45.2 per cent of the global population have effective access to at least one social security benefit. Levels of effective access are lower than legal coverage for a number of reasons. These can include incomplete levels of benefit takeup, administrative error, limited geographic reach of some social security programmes, as well as minimum eligibility criteria concerning thresholds for contributions which may exclude low-paid workers or those with an insufficient number of hours worked per month.

In global terms, a greater proportion of older persons enjoy a basic level of income security provided by social security programmes, in the form of pensions, relative to other groups. While 67.9 per cent of elders have access to basic income security, the ILO report that protection is extended to 34.9 per cent of children, 21.8 per cent of the unemployed, 27.8 per cent of people living with a severe disability and 24.7 per cent of vulnerable persons in need of social assistance.
CHALLENGES FOR EXTENDING COVERAGE

The objectives and targets of the Sustainable Development Goals show that there is broad support as regards the international ambition to ensure the delivery of social security programmes that are rights-based, universal, sustainable, equitable and adequate. There is also broad acceptance that social security systems remain important redistributive mechanisms for maintaining economic demand, just as they are important for addressing inequalities, alleviating poverty and strengthening social cohesion.

Over the last decades the policy objectives of social security systems have shifted. The origins of many social security systems lie with meeting insured workers’ needs for income replacement, insurance, redistribution and solidarity. Increasingly, the ambitions of many social security systems are now also directed to satisfying the fundamental human right to social security. In countries where tax-financed social security provisions already play a role, the pursuit of this broader policy objective should be more practicable. In countries where objectives remain focused more on meeting insured workers’ needs, greater challenges in this regard might be expected.

An example of this relative shift in focus, from workers to citizens, is the relative priority given over recent decades to extend income protection to the elderly poor. The expansion of social pensions, including in a growing number of low- and middle-income countries, illustrates this. Another example is social investment in children, which seeks to break intergenerational poverty by improving health, supporting future employment and improving socio-economic indicators.

The ILO estimates suggest that more than 60 per cent of the world’s workers are engaged in the informal economy. This fact sits uncomfortably with the conventional design of social security programmes that cater to workers in stable, formal and full-time employment. This results in an important coverage gap. This is the case even for informal workers who may have the financial means to contribute to social security programmes, but whose sectors of economic activity often remain legally excluded. In some schemes, informal workers have the option to contribute voluntarily, but may chose not to. Such a decision may be a calculated trade-off between the cost of contributing and the likelihood of receiving benefits. Other reasons for coverage gaps may range from a lack of ability to pay periodic contributions, seasonal fluctuations in income, limited trust in public institutions, and the weak capacity of social security institutions to enforce compliance.

The digital economy brings about new forms of work, typically not covered under existing social security norms and legislation. This can create a coverage gap due to the erosion of the employer-employee relationship that constitutes the linchpin of contributory social security programmes. The impact of this potential loss of coverage negatively affects workers as it does the institution’s financial status through a loss of revenues as well as government finances by increasing future demand for tax-financed social security.

Extending social security coverage can best be achieved by coordinating tax-financed and contributory programmes, and it is incumbent on policy-makers to capitalize on the relevance of different financing mechanisms. It is important to focus on the needs of people and put in place a response to the universal aspiration for effective access to social security benefits, facilities and services.

COVERAGE EXTENSION RESPONSES

The comprehensive coverage characteristic of welfare states illustrates that extending national coverage is facilitated by the complementary use of contributory, tax-financed and other suitable financing mechanisms. The ILO Recommendation on national floors of social protection, 2012 (No. 202), affirms the practical necessity of such an approach for all countries, wherever possible.

Innovative financing approaches.

The greatest coverage challenge is to extend protection to those who are most distant from the formal labour market and most vulnerable in society. For these groups, tax-financed responses
are the most suitable. For practical reasons, such as the lack of a stable home address, identifying the vulnerable often presents an administrative challenge. Other challenges may include overcoming issues of social stigma and prejudices regarding vulnerable groups, which are often a reflection of structural inequalities in society.

For non-poor informal workers, the innovative adaptation of the parameters of contributory financing offers opportunities to extend coverage for health insurance and cash benefits. Latin American countries have a track record in this regard, especially in the use of contribution subsidies for workers in the informal economy. The periodic manner in which contributions are paid and collected is also an important factor for small enterprises and for those engaged in seasonal or intermittent work. To help address such issues, and to reduce disincentives to formal work, Argentina, Brazil and Uruguay have simplified the contribution payment process. Similar developments are seen in the Republic of Korea, where the government subsidizes insurance contributions for enterprises with fewer than ten employees. This coverage extension measure offers financial support and encourages formal job creation. In Germany, the minimum contribution for “small” self-employed workers has been halved to support social health insurance coverage.

In Africa, social security institutions are enabling wider access to health care. In Kenya, the Health Insurance Subsidy Programme for the poor, the elderly and persons with severe disabilities, provides access to basic healthcare benefits under the National Hospital Insurance Fund. In Senegal, the Social Insurance Institute for Old-Age Pensions (Institution de prévoyance retraite du Sénégal – IPRES) subsidizes healthcare expenses for pensioners and their families. In Cameroon, the National Social Insurance Fund (Caisse nationale de prévoyance sociale – CNPS) finances half of healthcare expenses for pensioners in hospitals and healthcare facilities.

Supplementary solidarity contributions by high-earning workers is another way to support coverage extension, as well as support the longer-term financial sustainability of the programme. Colombia is an example of this. Solidarity contributions by all taxpayers, as in France, can also support the financial sustainability and adequacy of the social security system.

**Innovative policy and programme design.**

The use of conditionalities, such as vaccination or school attendance, is commonplace especially in developing economies and aims to promote positive long-term societal outcomes while providing immediate poverty alleviation. Brazil’s Bolsa Floresta programme in the state

“Enhanced administrative capacity is critical to effective coverage extension”
of Amazonas uses an alternative conditional requirement for family benefits: engagement in environmental protection.

The debate on coverage extension often pays insufficient attention to the challenges of programme implementation. Social security institutions should have a voice in policy development, to support the development of policy options that are realistic, appropriately resourced and flexible enough to adapt to evolving environments. In that respect, policy reform should always be accompanied by an evaluation framework from the outset to provide for the objective assessment of the programme’s ability to meet policy objectives.

**Life-course approaches to coverage.**

A growing trend is to take a life-long approach to managing risk. This seeks to offer cradle-to-grave access to social protection, tailored to people’s changing needs. Most European welfare states implicitly operate a life-cycle approach, with interventions ranging from pre- and post-natal benefits and services to elder care provided alongside workers’ benefits and universal healthcare systems and targeted programmes to prevent and mitigate risks.

South Africa provides the most extensive social protection coverage in sub-Saharan Africa, with 48 per cent of the population covered by at least one social protection benefit. This has been achieved by means of a three-pillar social protection framework. In addition to offering a wide range of periodic tax-financed grants as well as limited emergency financial aid for up to three months, South Africa also operates a public works programme.

**Leveraging ICT for coverage solutions.**

ICT solutions hold an unparalleled potential to enhance administrative capability and support coverage extension efforts. For instance, ICT facilitates the registration of contributors and beneficiaries, declaration and collection of contributions, reception and treatment of claims, management of appeals, payment of benefits, public dissemination of information, and the interconnectivity and coordination of social protection administrations.

Zambia’s National Pensions Authority, the National Social Insurance Fund of Côte d’Ivoire and the National Social Security Fund of Uganda have all improved the effectiveness and efficiency of their contribution collection processes, and thus strengthened coverage, using ICT platforms.

Chile’s Superintendence of Social Security (Superintendencia de Seguridad Social) depends on ICT to automatically generate a list of beneficiaries who have the right to permanent family benefits. In France, the National Family Allowance Fund (Caisse nationale des allocations familiales – CNAF) employs data mining to identify eligible beneficiaries who have not applied for benefits. The Indian government has rolled out a biometric identification system (Aadhaar programme) covering over 1.2 billion people to facilitate the distribution of benefits and ensure the portability of coverage rights across Indian states.
The advent of the digital economy brings about new forms of work, notably online platform work with jobs typically not covered under existing social security legislation. New forms of work may exacerbate levels of informal employment. Hence the protection of online platform workers presents challenges similar to those associated with the protection of informal workers, especially in the absence of a legal framework. With the cross-national nature of some online platform work, another challenge is the difficulty in deciding which national social security system should be attributed the responsibility for providing coverage for these workers.

Typically, social security programmes are designed to reflect the employment status of either employed or self-employed workers. However, some forms of online platform work can be currently difficult to categorize under either classification. This has exposed a potential legal gap and the absence of collective rights with respect to national labour regulations and social protection for a growing proportion of the working population engaged in online platform work. Extending social security coverage to online platform workers does not require complete makeovers of social security systems. The onus resides in making relevant amendments to existing legislation to grant the right to effective social security for all.

As a general rule in Europe, online platform workers are viewed to be self-employed and treated as such under applicable social security regulations. However, some countries such as Austria, Estonia, and Switzerland go beyond the general rule and classify platform workers as employees where an employer-employee relationship is apparent or actual. In France, licenced taxi-drivers are treated as self-employed under labour law and as employees under social security laws, while in Austria, Hungary and Poland existing legislation affords for the treatment of online platform workers as employees. Generally, the status of online platform workers necessitates further measures with respect to the provision of adequate and comprehensive social security protection.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Extending coverage is facilitated by the complementary use of contributory and tax-financed mechanisms.

The effective extension of social security coverage goes beyond policy and programme design: enhanced administrative capability is the gateway to the effective extension of coverage.

ICT solutions play a key role in enhancing the administrative capability of social security institutions to extend coverage.

The regulation of non-standard employment and the full declaration of earnings, including from online platform work, is necessary for the financial sustainability and adequacy of coverage.
GLOBAL COVERAGE

29%

Global population with comprehensive coverage in 2017

Source: ILO (2017)

5.1 billion

71% of the global population are without comprehensive coverage in 2017

GLOBAL COVERAGE, BY POPULATION GROUP

45.2%

Population covered by at least one benefit in 2017

Source: ILO (2017)

67.9%

Older persons with effective coverage in 2017

24.7%

Vulnerable persons covered by social assistance in 2017

GLOBAL COVERAGE EXTENSION

+1.5 billion

Social health protection coverage extended since 2006

Source: ISSA (2016)

+15.9%

Increase in the proportion of elders receiving old-age benefits, 2014–2017

Global population ageing, defined as the growth of older age groups (aged 60 or older; aged 80 or older) as shares of the total population is a reality. Three factors help explain this shift. One is declining fertility, which reduces the proportion of younger people in relation to elders. Increasing life expectancy is a second. The third factor is past variations in birth and death rates, which in many countries is associated with the post-Second World War “baby boom”. This visible bulge on population pyramids continues to rise through the older cohorts and in some countries has generated sustainability issues that, in turn, have created adequacy issues.

For countries that are more advanced in the demographic transition towards an ageing society, the drop in the relative size of the population of working age relative to non-working age – a rough proxy to distinguish between social security contributors and beneficiaries – presents a number of challenges for social security systems. The relative changes taking place within the younger working-age population cohorts are also important. Globally, in absolute terms, the working-age population will continue to grow, albeit at a slower pace than in recent past decades. The current and future relative size and economic activity of the working-age population are key factors for labour markets, productivity levels as well as the sustainability of social security systems.

While important regional variations persist in terms of scale, timing and impacts, population ageing globally is expected to increase the cost of providing social security pensions, healthcare and long-term care over the next few decades. The expected rise in social expenditure in many countries accompanies other current concerns about constraints on public expenditure, rising levels of inequalities, high and growing levels of precarious (informal and non-standard) work, and uncertainty about the future of formal standard forms of employment as a consequence of the continuing shift to the digital economy.

In this context, it is important to reflect on whether current programme designs can provide for the income security and healthcare needs of
all population groups. To be considered also is the nature and scale of intra-generational and intergenerational redistribution realized through social security programmes and the tax system.

THE CHALLENGES OF AGEING

Responses to population ageing include a better alignment of social and economic policies, notably labour market, education and social policies. Inclusive growth requires a skilled workforce. In most economies, women’s labour participation and compensation remain low compared to men. A higher rate of female labour participation would go a long way to mitigate projected labour force shortages. In all circumstances, a reduction of the unemployment rate and a parallel increase in the proportion of the population in work is fundamental to the sustainability of social security in the context of population ageing. A number of countries, most notably in Central and Eastern Europe, are projected to experience population decline in the next decades. In such cases, migration is expected to be part of the solution.

The predominant mechanism for social security financing continues to be social insurance. Maintaining this financing mechanism is important for the adequate protection of workers, and for current and future pensioners. As a result of population ageing, the demands made of the solidarity and redistributive components of many programmes are expected to increase. Tax-financed provisions are typically used to ensure income security, and the demand for such provision may rise to meet the uninsured needs of a longer-lived – but not necessarily healthier – population. In this context, for the adequate funding of the overall system, an efficient and effective national tax system is increasingly important.

In this regard, the rise of non-standard work in many economies requires innovative responses to incentivize workers and online platforms to contribute to social security and to fully declare earnings. Higher levels of stable formal employment reduce the cost of unemployment benefits and active labour market policies. The adjustment of pension systems to allow phased retirement seeks not only to help meet rising pension costs but acknowledges the benefits of active and healthy ageing. Meeting the changing needs of an ageing population necessitates new benefits and services (e.g., homecare, long-term care, age-friendly public services). Thus, social security planning is a key element of strategic public policy for ageing society.

RESPONSES TO AN AGEING WORLD

Global action in support of the social security protection of elders is a key objective of the 2030 Sustainable Development Goals. No less urgent, population ageing also raises the question of how best to meet the social security needs of the working-age population and children. It also brings to the fore a need in some countries to encourage higher fertility rates. Some pro-natalist social security programmes, for instance in France and Russia, have been successful in that respect.

Pensions. In the context of population ageing, old-age pension schemes are the focus of much policy attention. Most schemes worldwide were designed to cater to linear working careers and traditional family structures. Higher life expectancy at age 60, for men and women, combined with progressively more flexible life courses, changing family structures and increased labour market mobility, have led to a swathe of parametric and systemic pension reforms. The levers for action are limited to the quantum of contribution, the quantum of the pension and the length of the period during which people will receive it. The latter, through increases in the retirement age, has been a common response in high- and middle-income countries. Other more profound reforms have been pursued by recalibrating the complementarity of tax-financed and contributory schemes. While there is no single “best” solution, the sustainability and adequacy of a pension system is always dependent on labour policies that support inclusive growth.

Old-age poverty is a concern in most countries, and this may increase as more workers in non-standard careers approach retirement. A universal minimum pension is the most effective short-term response. This is seen in developing economies in Africa, the Americas, and Asia and the Pacific where informal
employment is common, as well as in high-income economies. In Canada, the old-age poverty rate was significantly reduced by the introduction of an income-tested, tax-financed, universal pension.

Older women commonly face higher poverty rates than older men. This is due to lower lifetime earnings and longer life expectancy than men. The former is the result of more fragmented work histories, lower wages, structural and cultural factors that limit employment opportunities (regardless of educational qualifications), a higher burden of family responsibilities, and the male-oriented design of some pension systems. To address this, Chile and France, for example, have implemented positive discrimination measures through their pension system. Other approaches include “drop-out” provisions to allow the deduction of some low-earning years and of child-rearing years from the calculation of the entitlement, thus increasing the average income.

Other responses to old-age income security are to foster more positive attitudes toward older workers and to encourage phased retirement from the labour force through the introduction of actuarially neutral, flexible pensionable ages. Providing options on the timing of retirement necessarily requires to be able to assess the consequences of different choices. Accordingly, providing support through enhanced financial literacy initiatives and through carefully designed default provisions is important. Social security information, such as the individual pension information provided in Germany, Sweden or the United States, contributes to better retirement planning and personal risk management.

**Facilitating autonomy.** Social programmes can help individuals to self-manage risk and navigate through an increasingly non-linear life course. China offers examples of civic and cultural programmes that help to combat social isolation and support empowerment, such as sports events for older persons. To support employment opportunities for elders, Indonesia has established Work Centres to provide training in practical capabilities. These measures are open to older workers with a desire to work and earn income. Numerous countries are facilitating elders — and future elders — to autonomously prepare and plan for life after retirement.

Social security systems in ageing societies continue to evolve. Social security administrations are playing an important role in developing and delivering innovative measures that allow people to better mitigate income, health, employment and care-giving risks.

**Care-giving responsibilities.** Population ageing, especially the growth of the population...
aged 80+, is one factor driving the growing need for health and long-term care services. Over half the global population is currently not covered by any long-term care legislation. Long-term care financed by social insurance contributions is found in a small number of countries, including Germany, Israel, Japan, the Republic of Korea, Luxembourg and the Netherlands. More commonly, paid care provided by governments is subject to means-testing, which targets coverage mostly on the elderly poor. At the global level, national average public expenditure on long-term care is low, at less than 1 per cent of GDP.

Care challenges are likely to intensify both for formal care systems and informal family carers: an increasing number of frail elderly people will require full-time care. Presently, there is a global shortage of about 13.6 million formal long-term care workers. One response is to offer contribution credits to unpaid carers. Some countries, such as Chile and France, provide general contribution credits to women for raising children. The design of a similar mechanism for elder care provision would facilitate meeting elders’ care needs, reduce the burden on institutional care provision, and strengthen the income security of the carer when he or she reaches retirement. Moreover, there are positive psychological benefits to ageing-in-place and receiving care at home. This requires enhanced coordination of healthcare and social programmes to ensure that the services are adapted and delivered as needed.

Healthy ageing. The ageing process involves a degree of loss of cognitive and musculoskeletal abilities. Such losses can be mitigated, but not fully prevented. With a growing global elderly population, investments in the promotion of a healthy lifestyle to prevent and reduce health risk factors are necessary. Brazil and Mexico have developed strategies to improve awareness of the health impacts of hypertension, particularly for the elderly. Mexico has also improved access to diabetes treatment for older people. Higher awareness is expected to increase demand for treatment among the older population.

A number of countries ensure universal health access with special consideration given to the needs of elders. Japan operates an Advanced Elderly Medical Service System, while Thailand’s Green Channel or Fast Lane provides outpatient care for older persons. Viet Nam provides free health insurance for persons aged 90+, and all older persons are entitled to discounted payments for health services.

Age-friendly workplaces. Increasing the labour force participation of older workers can offer benefits to individual workers, employers, and social security systems. This objective will require adapting work conditions and flexible work time as well as the reform of pension programmes to allow the phased transition from full-time work to retirement. In many countries, for example, Canada, France and Portugal, the removal of barriers to the continued labour participation of older workers is pursued.

Labour force participation also encompasses supporting the re-employment and activity of elders. Typically, the longer a person remains away from work, the more likely it will be that she or he will risk exclusion from the labour market. The use of proactive social security measures to support the return to work after a period of unemployment, ill-health or rehabilitation is increasingly common. Programmes in Belgium, Germany and Malaysia share a common objective: to accompany insured — and commonly older — workers back to work after an accident.
INNOVATION: FACILITATING AUTONOMOUS RETIREMENT PLANNING

To proactively support retirement planning, many social security institutions have committed to social innovation strategies to develop client-centric services for future retirees as well as retired elders. At the institutional level, this may require an unprecedented degree of coordination amongst institutions, and a strategic focus on adapting services and communication methods to individual needs.

A first step is to promote and raise awareness about the role of social security benefits and the need for retirement planning. It is possible to raise awareness from a young age, as in Singapore where social media is used as the preferred platform to communicate to youth and young adults. In Peru, Derrama Magisterial has extended its operational mandate and created an outreach pensions advisory service for its working-age affiliates.

Outreach can be achieved using online services, or on a face-to-face basis when requested, as provided by Singapore’s Central Provident Fund. All communications should be delivered using methods and terminology with which citizens are comfortable. In Singapore, to help promote services for the elderly, senior citizens with personal experience in retirement planning and in the promotion of healthy and active ageing are recruited as “ambassadors”.

A further innovative element in many countries is the coordination of public agencies to provide coherent and comprehensive “one-stop-shop” advice for not only retirement planning, but also to support health and well-being, interpersonal relationships, social inclusion and leisure activities. The National Pension Service of the Republic of Korea has developed a joint service network that incorporates no less than 18 local government welfare services and 16 specialized agencies.

All these measures complement the more commonplace development of online retirement portals that provide retired persons, as well as future retirees, with 24/7 access to retirement-related services and real-time personal data. Examples are the portal introduced by Algeria’s National Retirement Fund (Caisse nationale des retraites – CNR) and the Canadian Retirement Income Calculator (Service Canada). To develop these approaches further, an evaluation of client satisfaction should be a standard feature of all tailored services and social innovation strategies.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Though population ageing has an impact on the sustainability of social security schemes, important regional variations will continue in terms of the scale, timing, pace and impacts of population ageing.

Active and healthy ageing policies promote autonomy and can mitigate some of the costs associated with providing care for a growing number of elders.

Social security systems have a role to play in enhancing accessibility to adequate services for all population cohorts.

The current and future relative size, productivity, and economic activity of the working-age population are key factors for the sustainable financing, strategic planning and design of national social security systems.
LIFE EXPECTANCY AT BIRTH

63.3 years
Average healthy life expectancy at birth in 2016
Source: WHO (2018)

72 years
Average life expectancy at birth in 2016

Gender
Average life expectancy at birth in 2016 was 74.2 years (female) and 69.8 years (male)

GLOBAL POPULATION AGED 60+ AND 80+

962 million
The number of persons aged 60+ in 2017
Source: UN-DESA (2017)

137 million
The number of persons aged 80+ in 2017

425 million
The projected number of persons aged 80+ by 2050

IMPACTS OF FERTILITY RATE

9.8 billion
Projected global population by 2050
Source: UN-DESA (2017)

Slower growth
A reduction in fertility levels is slowing population growth

Older
A reduction in fertility levels contributes to population ageing
CHALLENGE 4

Information and communication technology
The technological transition

Worldwide, social security administrations use information and communication technology (ICT) as a strategic enabler to improve the performance and service quality of administration and the positive socio-economic impacts of programmes. ICT enables user-centric services and the implementation of large-scale social programmes involving multiple organizations at national and, to a degree, international levels. Such services are supported by traditional physical communications infrastructure and, increasingly, by mobile technologies. The increase in the use of mobile technologies better enables citizens to access social security online services. The main axes of technological innovation in social security are biometrics, digital identity, cross-organization coordination through e-government and blockchain, analytics and big data, and artificial intelligence (AI).

ICT is increasingly considered by social security policy-makers and senior administrators as a strategic enabler for innovation as well as for institutional evolution and transformation. While the focus of ICT use differs according to national context and social security policy priorities, the development of institutional capacities — especially on data management — constitutes a global trend.

Increasingly, social security institutions are reaping the service-enhancing potential of advanced technologies and technology-driven processes, such as e-government and inter-institutional coordination, advanced web portals with digital identity, biometrics, analytics and big data, the Internet of Things, blockchain, and AI. The important operational value of social security data is recognized more and more.

| ICT-RELATED CHALLENGES |

The intensive application of ICT presents different kinds of challenges. Strategic
challenges include defining the institutional vision concerning the use and application of ICT to achieve high-impact goals and identifying key success factors and risks. This requires establishing institutional medium- and long-term projects that take into account multiple factors such as policy objectives, human resources and ICT infrastructure. In this perspective, managing the complexity and cost-effectiveness of such projects constitute challenges in themselves, especially in a world of rapidly evolving technologies.

Ensuring the inclusiveness of programmes and mitigating the emergence of a digital divide are also priority issues. A number of specific risk areas and barriers that hinder the application of technologies have to be addressed. These include cybersecurity and access control, customers’ identification, data protection and privacy, and ensuring business continuity. Among these, cybersecurity risks have risen dramatically and, while cyber-attacks vary, their effects can be devastating. As social security administration becomes ever more digital, the data produced by social security institutions will constitute an ever more critical resource to protect.

ICT: STRATEGIC RESPONSES

Resilient ICT systems. The increasing use of ICT in mission-critical social security operations requires robust systems that are resilient to a variety of disruptions including cyber-attacks and other emergencies such as natural disasters. Capturing all dimensions of digital protection, the concept of e-resilience refers to the use of ICT in disaster risk management — prevention, reduction, preparedness, response and recovery — to reduce risks and their impacts.

A number of countries are implementing institutional cybersecurity measures, notably the real-time monitoring of cyber risks. The National Pension Service of the Republic of Korea has an Information Security Management System covering a wide range of activities such as users’ awareness and education on information security. The Department of Human Services (DHS) of Australia has a comprehensive approach to securing the institution, ensuring citizens’ data protection and fraud prevention. The DHS uses pervasive encryption and Secure Service Containers as well as a secured cloud infrastructure.

The Fiji National Provident Fund (FNPF) has developed its capabilities to enable business continuity during natural disasters and to provide specific benefits to the population. In 2016 during the category 5 cyclone Winston, the FNPF activated the scheme of Natural Disaster Assistance through which it assisted 182,571 beneficiaries and processed the equivalent of approximately three years of applications in two months.

While cybersecurity and e-resilience are critical for social security at the institutional level, national and regional strategies are also required. In Asia and the Pacific, the region most affected by natural disasters, the United Nations Economic and Social Commission for Asia and the Pacific carried out initiatives to improve broadband network resilience, implement a regional early warning system, provide online services to facilitate information sharing on the use of ICT for disaster risk management and e-resilience, and capacity building activities for e-resilience in high-risk, low-capacity countries.

Personal identification through biometrics and digital identity. Increasing attention is given to delivering individual client-centric services and providing the right services, at the right time, to the right person. To do so, institutions are increasingly adopting digital identity supported by biometric technologies — to extend and target coverage. Identity management is a critical enabler to increase social security coverage and support inter-institutional coordination.

Biometrics address the challenge of personal identification. For example, they enable to validate the identity and perform proof-of-life of pensioners in the National Social Security Institute of Mozambique. This is equally so for the National Social Security Administration of Argentina (Administración Nacional de la Seguridad Social — ANSES), which enables biometric-based validations not only in ANSES’ offices but also using self-service kiosks. The integration of biometric technologies and smart-cards in contribution collection and benefits management processes has been carried out by Gabon’s National Social Security Fund (Caisse nationale de sécurité sociale — CNSS).
The Social Insurance Bank (SVB) of the Netherlands has piloted using facial and voice recognition technologies to perform beneficiaries’ proof-of-life.

National identification services based on biometrics are being developed in several countries. In India, the Aadhaar programme is providing biometric-based digital identity to the entire population. The Philippines has introduced a biometrics-based national ID system.

A national digital identity initiative has been carried out in Peru, where the National Registry of Identification and Civil Status (Reniec) implemented a national electronic identity document. A large-scale digital identity system is being developed in China, where social security services are using a prominent social media platform for electronic ID in coordination with electronic social security cards, and there are plans for a facial recognition database to ID its population of 1.3 billion people.

Using a personal ID held on Subscriber Identity Module (SIM) cards to implement secured online transactions has been adopted by the Ministry of Labour and Social Protection of Population of Azerbaijan, the Auxiliary Unemployment Benefits Fund (Caisse auxiliaire de paiement des allocations de chômage – CAPAC) of Belgium, the Social Insurance Board of Estonia, the Social Insurance Institution (KELA) of Finland, and the Iranian Social Security Organization.

In addition to providing strong and agile personal identification means, digital identities also enable the delivery of personalized web-based services. Web portals that permit mobile-based access, and which can authenticate digital identities, have been developed in a number of countries.

**Inter-organizational coordination.** Inter-organizational coordination is important for social security institutions and takes different forms, notably through e-government platforms, but also increasingly using blockchain technology. Blockchain technology enables to implement highly-secured distribution systems that retain the entire history of all transactions and which involve a large number of participants but which function without a central coordinator.

Although its use remains nascent in social security, blockchain technology facilitates the implementation of large-scale services involving very diverse partners, such as pharmacies, doctors, and medical service providers. In Belgium, blockchain is helping to re-engineer the health insurance paper-based information flow; in Estonia, to implement new medical records and e-prescriptions; and Saudi Arabia is piloting the implementation of sickness certificates.

“ICT is a strategic enabler for the administration and transformation of social security systems.”
International data exchange applications supporting bilateral social security agreements and cross-border coordination are implemented using web-based interoperability technologies. As such, pairs of institutions interoperate with each other to exchange data.

**Leveraging big data and analytics.** In the last decade, social security institutions have developed data management capabilities – especially Master Data systems – to ensure data availability and quality as well as to develop value-added functions taking advantage of increasingly rich data availability. The accumulation of institutional data, in addition to external data obtained through inter-institutional collaboration, enables the development of big data systems. Furthermore, social and biometric data collected through a large-scale application of monitoring devices, the so-called Internet of Things, constitutes an emerging additional source of big data.

Social security institutions use analytics to transform massive quantities of raw data into useful insights by detecting patterns, trends and correlations. The pairing of analytics and big data enables social security institutions to perform sophisticated analysis ranging from detecting unusual phenomena to developing predictive models. Also, analytics helps to develop and assess the impacts of cross-sectoral policies. Predictive modelling and computer simulations on big data can be used to conduct such analysis. This so-called data-driven innovation (DDI) is generating improvements to products, services, processes and organizational methods.

**Addressing evasion and fraud.** Analytics allows the detection of evasion and fraud in contribution collection, as seen in Argentina, France, Saudi Arabia, Spain, and Uruguay. It also permits to detect fraud in benefits delivery, as seen in Australia, Belgium, France, Italy and Spain.

**The emerging use of AI.** The emerging use of AI technology is crucial for innovation and institutional transformation. Based on social security data, AI techniques enable the implementation of fully automated systems based on machine learning and similar techniques to deliver more proactive social security services.

A growing practical application of AI consists of intelligent chatbots (a robot software capable of dialogue) to support self-e-services. The Superintendence of Occupational Risks of Argentina (*Superintendencia de Riesgos del Trabajo* – SRT) implemented a chatbot to respond to questions about work injury benefits, and the Social Insurance Bank of Uruguay (*Banco de Previsión Social* – BPS) has one for the domestic workers scheme. The experimental use of intelligent chatbots has been launched by Belgium, Finland and Saudi Arabia. Furthermore, Belgium’s CAPAC is exploring how to apply AI and deep learning systems to assist staff to support decision-making on benefit claims.

The application of AI in public health can support clinical staff to improve the quality of medical services and reduce costs through personalized and predictive medicine. AI combined with big data capabilities holds a preventive potential to pre-diagnose illness and for the effective early detection of health risks.

**Digital transformation of institutions.** ICT is increasingly at the heart of strategic institutional transformations to develop innovation capabilities. Such digital transformation involves (re)defining aspects of the institutional governance through the digital governance frameworks. The *ISSA Guidelines on Good Governance* call for the board and the management to develop a shared vision of the institution’s digital future and to define broad, universal digital standards for service. It suggests the establishment of a digital governance framework that ensures that, even as digital solutions are offered and prioritized, due care should be taken that a digital divide is not created. It also calls for policies on the protection of personal data and the ethical use of big data and AI, in particular the prevention of risks such as data misuse and the unintended consequences of data mining and algorithmic biases.

A relevant example comes from Finland, where KELA is currently undergoing a strategic transformation of its ICT platform and operational model by adopting AI. The ultimate goal is to improve institutional capacity to adopt cutting-edge technologies in order to carry out strategic transformations.
INNOVATION: DATA-DRIVEN IMPROVEMENTS TO PROGRAMMES AND SERVICES

A number of national social security institutions are using analytics and big data to improve their programmes and services.

As part of an institutional platform, the National Family Allowances Fund (Caisse nationale des allocations familiales – CNAF) of France has implemented analytics-based applications providing insights about beneficiaries’ behaviour, especially atypical ones, in order to improve social programmes and services. The system includes end-user oriented visualization methods.

The National Health Insurance Service of the Republic of Korea has implemented a big data system – the NHID – covering the entire population and using multiple variables for each person integrated through a unique individual ID. The NHID constitutes a strategic tool to provide evidence for disease prevention and effective risk prediction, improved service quality, and to support research and development in collaboration with a number of national partners such as other governmental agencies, health institutions, and medical professionals and the research community.

In the context of a Digital Transformation project, the Mexican Social Security Institute (Instituto Mexicano del Seguro Social – IMSS) implemented a big data system covering insured persons and beneficiaries. While it supports a wide range of administrative functions covering fraud detection in contribution collection and employment indicators, the current focus is on modelling the prevention of chronic diseases especially diabetes mellitus and hypertension.

Elsewhere, developing institutional capacity on business intelligence and analytics with the aim of implementing different applications has been reported by Argentina’s National Social Security Administration (Administración Nacional de la Seguridad Social – ANSES), Dataprev of Brazil, the Public Authority for Social Insurance of Oman and the Social Security Administration of the United States.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

ICT constitutes an indispensable enabler for administration and often spells the difference between services and processes that can or cannot be done.

There are tasks and roles that cannot readily be replaced by ICT-based interventions. Decision-making activities, as well as case management and client services, require expert human intervention. The strategic adoption of new technologies and the management and development of human resources should go hand in hand. The combined aim should be a smarter use of staff facilitated by technological innovation.

Socio-cultural characteristics also continue to make human contact important for service delivery.

The intensive application of cutting-edge and emerging ICT constitutes a success factor but also involves risks and challenges. Therefore, institutions should carry out technology adoptions and digital transformation through well-defined strategies and structured plans aligned with institutional objectives.
INTERNET USE

3.9 billion
51.2% of global population using the Internet in 2018
Source: ITU (2018)

~50%
Global proportion of households with a personal computer in 2018
Source: ITU (2018)

1.94 billion
Global number of websites 2018
Source: Hosting Facts (2019)

MOBILE AND HIGH SPEED ACCESS

96%
Percentage of global population within reach of a mobile cellular network in 2018
Source: ITU (2018)

90%
Percentage of global population with Internet access using 3G or a high speed network in 2018

CYBERSECURITY

50%
Half of surveyed UN member States have no cybersecurity strategy
Source: UN e-government survey (2018)

~20%
Less than a fifth of surveyed UN member States conduct cybersecurity audits
Public expectations

CHALLENGE 5
In many countries, the benchmark for customer and client service experience is increasingly set by private-sector digital platforms for travel reservations, entertainment or online shopping. This sets the bar high for social security and other public agencies. Moreover, a heightened awareness of the human right to social security is driving public demand for better social security benefits and services, but doing so in a context of public finance, socio-economic, demographic and environmental challenges. These challenges spur social security administrators to search for better service models that are more cost effective and easily scalable.

The shift to e-government is leading the public to expect more in terms of the range and quality of public services. With the digitalization of public services, including for social security, the public also expects greater transparency, accountability and better governance. The expectation is that e-government should make it easier to deal with government departments and agencies, eliminate corruption, remove red-tape and bureaucracy, and offer “anytime, anywhere” services according to user needs, choices and preferences.

From an administrative perspective, digital technologies should enhance the quality of public services as a whole by making use of information already held by the public administration (in keeping with the “ask once principle”) thus enabling interconnected, multi-organizational procedures through one-stop-shops (i.e. provided through a single delivery contact).

**PUBLIC EXPECTATION CHALLENGES**

Mobile technology and social media provide instant 24/7 access to information, placing public services, including social security administration, under unprecedented public scrutiny. Positive client experiences enhance institutional image and reputation, but negative client feedback can be damaging. Administrators...
are keenly aware that reports of sub-standard service can quickly go viral and make the headlines. This adds a new dimension to the objective of delivering the right benefit, at the right time, to the right person. Social security institutions must not only deliver, but they must deliver well and to the full satisfaction of their clients.

There are compelling reasons for advancing the digital transformation of services. Digital technologies permit to transform public services and enable greater engagement with citizens and achieve higher public trust through more transparent and effective services. In addition to citizen convenience and the savings made in time and resources, there is a solid business case that data driven decision-making facilitates improved output and productivity.

There are, however, daunting challenges and important hurdles to overcome in order for e-government and digital government to deliver on its promise. Public agencies, and not least social security departments and healthcare services, have to allay apprehensions about the inclusiveness and accessibility of digital public services for all population groups. Service quality improvements based on an intensive use of technologies must not generate digital inequalities or exclude those who may lack or have limited e-literacy or have no access to the Internet.

As a greater volume of personal data is collected, managed, shared and stored electronically by public institutions and service partners, there are growing public expectations concerning personal data protection. In particular, these relate to the appropriate sharing of individual data across different public agencies, which is a prerequisite for the implementation of more efficient and proactive public services (e.g. one-stop-shop models) predicated on the ask-once principle of providing personal information.

An emerging additional public concern for service quality relates to the development of biometric data. The concern is not only to guarantee the safekeeping of such data but to prevent its possible unethical misuse – access to such data could influence the behaviour of medical insurance providers. The trade-off is between data protection and implementing smart multi-organizational public services.

The protection of personal data is also a matter of concern when social security institutions use public social media networks. Although most countries have established national regulations and recent initiatives, notably in the European Union (EU), are moving towards regional enforcement, the lack of global regulations and enforcement measures continues to hinder cross-border data protection.

The conventional five-point framework to enable social security institutions to best meet public service quality spotlights the need to: know your clients; engage with your clients; innovate and re-engineer; empower the organization’s workforce; and go electronic, go mobile, go online. While these internal enablers remain important, social security institutions are increasingly engaged with a wider community of public agencies involved in the delivery of public services. As an enabler of digital government, a sixth element is required: collaborative partnerships across government agencies.

To date, many government agencies have operated in relative autonomy. To enable collaborative partnerships, legislative regulatory reform may be required to break down institutional silos. Digital governance frameworks should be established to spell out the digital strategies, policies and standards, including those that relate to data ownership, the sharing of ICT platforms and databases; data integrity, privacy, security and protection; and the ethical use of information, artificial intelligence, big data and analytics. Some policy issues to be resolved include striking a balance between privacy and openness; public engagement and interaction with service users; the pace of digitization; and empowering citizens and civil servants.

**RESPONDING TO THE CHALLENGES**

To meet higher public expectations, social security institutions have embarked on a quality service delivery journey. This aims to build an inclusive multichannel delivery approach, wherein services are provided through a diversity of means accessible to different population groups, e.g. service modalities such as mobile, internet, kiosks, call-centres, and presence-based counters.
The implementation of digital channels as well as digital cross-organizational coordination is increasingly the go-to solution. This is done not only to provide e-services for the direct use of citizens but also to modernize and transform the services that gravitate around human interaction. In some cases, there is an expectation for service delivery modalities to be increasingly shaped and influenced by user demand for tailored personal services. Such a process of social innovation is facilitated by information crowdsourcing and data analytics, joined-up administrations and innovative services tailored to individual needs.

The digital divide, commonly considered to be a lack of access to the Internet and hardware, has evolved as connectivity has steadily improved, notably through mobile access. However, new digital divides have emerged that are related to digital literacy and user know-how.

Special attention needs to be paid to vulnerable groups and persons with disabilities. An overriding concern is that citizens who are unable to engage fully with digital technologies should still have access to alternative modalities of quality service. Responses to this challenge are emerging. The Social Security Administration of the United States is a pioneer in implementing e-services accessible to persons with disabilities, and the World Wide Web Consortium (W3C) has developed a standard and has good practices for implementing web portals accessible to persons with disabilities.

Other national digital inclusion programmes are the one-laptop-per-child programmes in Uruguay and Argentina, or providing tablets with accessible configurations to retirees in Uruguay. At a regional level, an EU Directive (EU, 2016/2102) on the accessibility of websites and mobile applications of public administrations seeks to render these more accessible to all users, and in particular to persons with disabilities.

Worldwide, a large number of countries have created special online government services to address the distinct needs of vulnerable groups in society. These online services serve the needs of groups such as young workers, women, migrants, elders, people living below national poverty lines as well as persons with disabilities.

In all regions, it is possible to discern a number of national initiatives providing digital and interconnected service delivery. In Africa, one effective strategy is for institutions to partner and pool resources, to “deliver as one”. Algeria’s National Social Insurance Fund for Employees (Caisse nationale des assurances sociales des travailleurs salariés – CNAS) has been able to modernize management, standardize techniques and implement the large-scale computerization of activities by

“E-services and digital services are about putting technology at the service of all people”
pooling resources with the country’s other social security institutions.

In Madagascar, the National Social Insurance Fund (Caisse nationale de prévoyance sociale – CNaPS) has forged partnerships with the State Treasury and other public agencies. Efficiency gains in operations have been achieved, especially in the provision and payment of benefits in the country’s remote areas where the NHIF has few or no field offices. Uganda’s National Social Security Fund has developed an application that interfaces directly with banks and employers to improve contribution collection and registration.

In the Americas, Canada has implemented digital and interconnected service delivery across jurisdictional boundaries. Legislative and regulatory changes coupled with IT system enhancements have provided the base for developing information sharing agreements among the provincial and federal partners of Employment and Social Development Canada (ESDC). The reform measures allow the ESDC to directly obtain required personal information, and to automatically enrol individuals entitled to old-age security basic pensions and guaranteed income supplements.

In Asia and the Pacific, the National Pension Service of the Republic of Korea has developed a computer network that connects the databases of the country’s four national social insurance programmes for pensions, health, employment and worker’s compensation. In Oman, data integration between the Public Authority for Social Insurance and related government agencies enables the electronic extraction of all information related to employers and employees. The initiative has enhanced accuracy of registration data, prevented evasion, and improved contribution collection and benefit distribution.

In Europe, ICT is helping to improve services in different social security branches and operational functions through advanced web portals with personalized web-based customer services. In this manner, the Social Insurance Institution of Poland manages sickness certificate customer services and the Norwegian Labour and Welfare Service (NAV) implements sickness cash benefits. The NAV has also implemented an online and automated system enabling old-age pension calculation and customer services.

Belgium’s Crossroads Bank for Social Security (CBSS) coordinates and implements the e-government strategy in the social sector. The country has re-engineered a united IT delivery system that involves 3,000 public and private institutions at the federal, regional and local levels. Some metrics include 1 million online messages daily, 99.98 per cent availability of 24/7 electronic services with at least 99.87 per cent of online services processed in less than 2 seconds.

In Azerbaijan, applicants for state targeted social assistance no longer have to file paper applications because the Ministry of Labour and Social Protection of Population (MLSPP) has access to the databases of relevant government agencies through the unified e-government portal. In addition to improving service delivery, the unified electronic subsystem has provided the opportunity to introduce anti-corruption measures in benefit distribution thus improving transparency and enhancing public trust. The MLSPP has also implemented personalized services for disability assessment and rehabilitation.

The development of mobile services and the shift towards app technologies continues to meet the need for higher levels of service-user satisfaction. Mobile payment services, which were largely pioneered in Africa, continue to expand. In Kenya, the National Hospital Insurance Fund has adopted M-PESA for the payment of health insurance premiums via mobile money.

Previously confronted with rising levels of public dissatisfaction, the Mexican Social Security Institute (Instituto Mexican del Seguro Social – IMSS) has since complemented conventional office and face-to-face services with the IMSS Digital Strategy, which has significantly changed the nature of service delivery. The next stage will see the launch of IMSS Digital, a new app service. To help meet the complex needs of vulnerable client groups and to address concerns about the digital divide, the changes introduced by the IMSS have freed up staff, who have been redirected to face-to-face services.
INNOVATION: CHANGING STAFF AND CITIZENS’ CULTURE TO IMPROVE SERVICE DELIVERY

The United States Social Security Administration (SSA) has a client group of around 42 million retirees who receive social security benefits (old-age and disability pensions). Nationwide, the SSA has 1,300 offices and 40,000 staff. A strategic concern was the large amount of time spent by staff aiding clients when they first made a claim for an old-age pension, which was proving detrimental to the ability of staff to undertake disability assessments and process claims to disability pensions.

In response, the decision was taken to innovate, to place online the claim process for old-age pensions. An immediate challenge was resistance from staff, who were uneasy about the possible negative impact on conventional face-to-face support provided in local offices when offering guidance for the important decision-making that accompanies retirement. There was also concern about digital exclusion among the large diverse client group. The SSA partnered with an external consultancy company, which observed the behaviour of retirees and their use of computers. Thereafter, decisions were taken about the form and content of information presented on the SSA web-based interface.

The reform was phased in, not only to fine tune and correct for unforeseen challenges, but to limit the risk of implementation failure. Retirees were given training on how to use the new system. An estimated 70 per cent of new retirees now use the system to claim their old-age benefits, and the transition to the new business model has been a success.

One lesson learnt was the need to invest more in staff training early in the process. This would have empowered staff and won greater staff engagement from the outset.
E-services and digital services are not about technology: they are about people, about putting technology at the service of all people.

Actions to improve service delivery may involve not just a change of client culture and institutional culture but an orientation towards a whole-of-government culture as well. To increase satisfaction levels with new delivery mechanisms, training is useful for clients and social security staff alike.

Connectedness across different levels of government, social security institutions and among partners is fundamental to jointly develop digitization strategies, creating common ownership and achieving sustainable and successful outcomes for service delivery.

Growing public expectations concerning personal data protection is a challenge. Failure to protect data is an important reputational risk for social security institutions.
SERVICE QUALITY

6 rules
1. Know your clients
2. Engage with your clients
3. Innovate and re-engineer
4. Empower social security staff
5. Go electronic, go mobile, go online
6. Collaborate and partner across agencies

Source: ISSA (2019)

E-GOVERNMENT

4 benefits
1. Better public service delivery
2. Wider access to social security
3. Improved literacy
4. Higher levels of financial and social inclusion

Source: ISSA (2019)

DIGITAL CHALLENGES

<50%
Mobile phones

More than half of social media users are concerned about false information

Source: Pew Research Centre (2019)

Mobile phones can improve public services but they require adequate connectivity
Employment

CHALLENGE 6
The United Nations Sustainable Development Goal (SDG) 8 calls upon the international community to promote “full and productive employment and decent work for all”, including for the world’s younger workers. Current global estimates suggest that one in five young people (aged 15–24) are not in employment, education or training (NEET). Further, in spite of the global trend in population ageing, and relatively reduced rates of population growth, in sub-Saharan Africa and across the Arab States the projected absolute numbers of young people will continue to grow. In the coming decades, around nine of every ten jobs that the global economy will have to create to employ young workers will be needed in low- and lower-middle-income countries. These are countries where decent work and social security systems are often less-well developed. For more developed economies, population ageing is contributing to labour shortages in some sectors. A common labour market challenge is to match employer demand with workers who have the required qualifications and skills.

In many countries, young people present complex challenges for social security and labour market policies. The 2007–08 global crisis demonstrated that young people are often the group hardest hit by unemployment in periods of economic downturn. Over the last decade, revitalized growth in the global economy has not been accompanied by a comparable rate of job creation, and in some countries levels of underemployment, unemployment and
long-term unemployment among young workers remain high.

The International Labour Organization (ILO) estimates that the global unemployment rate for young people in 2018 stood at 11.8 per cent, compared to the total unemployment rate of 5 per cent. Over two-fifths of the world’s young workers do not have decent jobs. More than one in three young workers in low- and middle-income countries live in extreme or moderate poverty. Also, young workers are commonly more prone to injury in the workplace.

LABOUR MARKET CHALLENGES AND YOUNG WORKERS

The healthy expansion of formal labour markets and the development of adequate education and training systems, skills upgrading and employment promotion activities is a global challenge. Addressing all of this will require the coordinated responses of social security administrations, public employment services as well as education and training institutions. Commonly, the risk of unemployment or underemployment is greater for those workers who are most disadvantaged and vulnerable (people with chronic health problems, disabilities, behavioural problems, or addictions; migrants; ethnic minorities; etc.).

While there may be similarities in the profiles of people most at risk, the needs of young workers more generally present multiple challenges that can vary across regions. A challenge in countries of the Middle East and North Africa is, on the one hand, a shortage of jobs for workers leaving tertiary education and, on the other hand, a shortage of skilled labour. In Latin American countries, labour markets are heavily gendered. The most productive types of employment are held by men, while employed women are more likely to work in the informal economy.

There is uncertainty about how increasing automation in the workplace will affect job destruction and creation. While the potential to automate forms of repetitive work using digital technology is increasing, predictions about the near-term demise of work appear unfounded. For most professions, it is likely that specific work tasks will be replaced by technology, rather than entire job categories. The development of online platform work is creating new job opportunities, including for young workers. Many of these new jobs are classified as “non-standard” and precarious, and it is rare for these jobs to provide the sole or dominant source of earnings. National regulatory frameworks are slowly but increasingly being extended to online platform work. In more developed economies this may counter the trend towards the growth of precarious employment. In developing economies, this may provide a mechanism to regulate new forms of work, and thus extend formal employment, collective employment rights, occupational safety and health regulations and social security coverage.

RESPONDING TO THE NEEDS OF YOUNG WORKERS

Many national experiences suggest that policy interventions to support the employment of young workers should be multiple and staged in a manner that acknowledges the dynamic nature of risks. For unemployed young workers, risks should be identified and actions put in place at all stages. Beyond income protection, workers frequently need activation measures, such as work placements, subsidized employment and skills (re)training, and all such measures should have a gender dimension.

Unemployment protection. ILO statistics show that 22 per cent of the global labour force enjoy effective coverage under employment protection schemes. Regional differences range from 5.6 per cent in Africa, 16.7 per cent in the Americas, 22.5 per cent in Asia and the Pacific to 42.5 per cent in Europe. Many countries have expanded the scope of employment protection by combining cash benefits with skills development, training and active labour market policies. Eligibility to receive benefits is usually dependent on actively seeking work, enrolling in training programmes and accepting reasonable job offers.

Asia and the Pacific is currently home to 60 per cent of the world’s young workers and is also the region where most new unemployment insurance schemes have emerged in recent years. Most recently, Malaysia implemented its
unemployment insurance scheme in January 2018. New programmes such as this are essential, and their introduction should offer income security to workers when making the transition from unemployment to work.

**Incentivizing social security coverage.**
Unemployment programmes may have objectives that are broader than income replacement and offer access to a wide range of benefits and services. These are not only more likely to be more effective but should incentivize workers to affiliate to such schemes. In China, unemployment insurance regulations have been revised so as to oblige unemployment funds to continue paying health insurance and pension contributions either fully or partially for unemployed members. At the same time, China has continued to reform its unemployment insurance by raising the standard of unemployment benefit, adding the objective of unemployment prevention, extending coverage to all types of institutions and employees (except government entities), and implementing a vocational skills upgrading subsidy.

Under the Moroccan unemployment insurance programme, unemployed workers can not only claim unemployment benefits for 6 months but also continue to receive full social security entitlements, including family allowances and access to health insurance coverage. In France, young people between ages 18–25 who were previously excluded from the Active Solidarity Income (Revenu de solidarité active – RSA) programme, now have access to unemployment protection.

**Supporting employment and employers.**
Youth employment challenges are much more severe in rural than urban areas in developing countries. Evidence from 29 youth employment programmes across 13 developing countries demonstrates that skills training, particularly when combined with other interventions such as life skills development and internship, increased employment and earnings outcomes among rural youth. Also, providing incentives for job searches, such as lowering transportation and migration costs, leads to positive employment and income effects for rural youth. In turn, the combination of business skills training with business advisory services and financial support have led to positive effects on self-employment in rural settings.

In Bangladesh, a transportation subsidy helped increase employment and earnings among rural workers, as it encouraged them to travel to urban areas to seek work during the agricultural off-season. In Egypt, the provision of technical, business and vocational training has had a positive impact on the development of businesses by young women in rural areas. In India, the National Rural Employment Guarantee Act (NREGA) involves young people

> “For unemployed young workers, risks should be identified and actions put in place at all stages”
in rural infrastructure rehabilitation through public works programmes. In Nigeria, the Youth Employment in Agriculture Programme (YEAP) provides rural youth access to land, markets, and finance to help them become entrepreneurs while supporting them to work and live in rural areas.

More generally, a wage subsidy scheme in South Africa incentivized graduates to look for jobs harder and longer, and has resulted in an increase in the number of those in waged employment. The Republic of Korea has introduced at least three youth employment subsidy programmes to enhance youth employment. In Canada in 2017, the National Research Council launched a youth employment programme for workers aged 15–30. This provides 6–12 months of funding support to small- and medium-sized enterprises to cover the salary costs of recently-graduated interns working on certain technology-related projects.

**The role of education.** Education is a key determinant of life-long improved outcomes for people. In that respect, social security systems should support active interventions including (re)training and education. Conditional cash transfer programmes have effectively increased the enrolment rate for lower-secondary studies in a number of countries, such as Mexico. Similarly, school-based programmes to prevent pregnancy in a number of countries have worked effectively to reduce dropout rates among upper-secondary school students. These human capital investment measures strengthen the future capacities of young people to successfully enter the workforce.

Hong Kong (China) has established an Employee Retraining Board and a Continuous Education Fund, which subsidizes up to 80 per cent of training fees to encourage workers aged 15–64 to upgrade their skills. In Peru, the Peruvian Job Youth Training Program (Projoven) offered in-classroom technical training together with a 3-month internship for underprivileged young people in nine cities. Significant positive impacts for youth were observed in terms of employment and earnings.

**Strategic planning.** Unemployment and underemployment challenges are often of a structural nature, which makes some of these more intractable to solve. This is especially so in economies with large informal labour markets. Social security administrations cannot meet the challenges alone. Such systems require national-level collaboration between employers, trade unions and governments, including the setting of wage levels and labour market regulation. This may be necessary not only to drive employment growth but to counter the potential risk of social instability and unrest among the marginalized working-age population.

Apprenticeship systems that operate as an integral element of labour markets are viewed as a factor in lower unemployment rates among young workers. They help bridge the transition between education and work, while providing valuable employment and life skills.

In the European Union (EU), the European Pillar for Social Rights has been developed to ensure a better balance between economic and social objectives and to build more effective and fair labour markets and social security systems. Also, the Skills Agenda for Europe seeks to improve the quality and relevance of training and skills acquisition. Stronger public employment services are also being pursued. The EU Youth Guarantee scheme ensures quick and quality access to education, training or job offers to young people.

Strategic policy responses can also support broader national labour market objectives. In recent years, South Africa’s Return Home for Entrepreneurship programme has successfully incited close to 400,000 high skilled professionals to return home. It is suggested that each returning skilled professional has helped create an average of nine new additional jobs, either directly or indirectly, in the South African economy.
INNOVATION: THE REDESIGN OF ACTIVE LABOUR
MARKET POLICIES

Active labour market policies (ALMPs) have become a core element of employment policy to support the return to work or activation of workers. The development of ALMPs in many countries has led to a shift in expectations concerning the role of the State, the objectives of employment insurance and unemployment protection, and the rights and obligations of jobseekers.

A strong argument in favour of ALMPs is the evidence that the longer a person is excluded from the labour market, the harder it will be to return to stable employment. ALMPs have therefore sought to shorten the period of unemployment or inactivity between jobs. A feature of ALMPs is the conditionality attached to the receipt of the unemployment benefit. Commonly, it is expected that the jobseeker will pursue an active search for a job, undergo training, and fill a vacant position that may be subsidized. Failure to meet the conditions normally results in losing entitlement to the full cash benefits.

It is important to ensure that both the worker and the employer’s needs are best met. Those selected for jobs are often those who are deemed to be most “job ready” for the employment market. In contrast, those who are less job ready – particularly those who have more complex personal needs – have not benefitted as much.

An innovation to address this last concern has been to develop ALMPs that partner more closely with employers and seek to match workers to employer demand. Such employer-oriented ALMPs can also be more inclusive of long-term unemployed jobseekers with more complex personal profiles (e.g. disabled people, young migrants with limited language skills).

By providing employers with recruitment services, financial subsidies for hiring costs, and by adapting the workplace and working conditions, employer-oriented ALMPs offer a more promising possibility to help those most marginal to the labour market into stable employment.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Public policy should create an appropriately skilled workforce and the conditions that permit job creation.

Establish close collaboration and coordination among different public institutions and employers’ and workers’ organizations.

Adopt a holistic approach to the design of labour market regulation, ALMPs, and unemployment benefit programmes.

Adopt special measures to address the more complex needs of those jobseekers who have been outside the formal labour market longest.
**YOUNG WORKERS**

- **13%**
  - Global youth unemployment rate in 2018
  - Source: ILO (2018)

- **>145 million**
  - Global estimate (2018) of young workers in poverty

- **73.3 million**
  - Unemployed young workers globally in 2019
  - Source: ILO (2019)

**THE NEED FOR DECENT WORK**

- **40%**
  - Proportion of young people who are unemployed or work and live in poverty in 2018
  - Source: ILO (2019)

- **90%**
  - Proportion of young people engaged in the informal economy in developing economies in 2018

**GLOBAL CHALLENGES AND RESPONSES**

- **1.5 billion**
  - Global estimate (2018) of workers in vulnerable employment
  - Source: ILO (2018)

- **192 million**
  - Global estimate (2018) of new jobs needed to attain full employment

- Lifelong training and active labour market policies are needed
  - Source: ILO (2019)
Digital economy

CHALLENGE 7
Labour markets and the digital economy

Labour markets are undergoing major changes due to the rapid deployment and acceptance of new technologies and of the new forms of work they enable. The “fourth industrial revolution” together with the rise of online platforms creates new employment opportunities and helps to bridge demand and supply through real-time information. However, it also poses problems of labour disruption and labour fragmentation in both developing and developed countries, raising serious concerns in terms of the coverage, adequacy and sustainability of social security systems.

Digitalization and artificial intelligence are massively transforming our world. Digital technologies and automation have already proven their enormous potential in a wide range of contexts, including health care, communications, occupational safety and health, unemployment protection, contribution collection and exchange of data. Social media, video-conferencing, mobile phones and the Internet of Things facilitate interaction with clients and a timely assistance to people in need, such as elderly people with restricted mobility or people with disabilities. They are powerful tools to improve service quality while reducing costs.

The implementation of increasingly autonomous and intelligent automated systems is transforming jobs in the manufacturing and service sectors. Online work platforms are transforming entire economic sectors by instantly matching demand and supply and providing access to vast markets. In doing so, they also change the nature of the employer-employee relationship and challenge the definition of self-employment. Social security systems, focused mainly on full-time employees, need to adapt to these new forms of work to meet the needs of online platform workers and their families.

In addition, online work platforms enable cross-border work, which raises the issue of under which social security system the worker should be enrolled. In a migrant-worker scenario, the worker would be enrolled in the social security system of the contracting country. In a self-employed or detached worker scenario, he or she would be enrolled in the home country.
social security system. In parallel, challenges regarding data privacy, data security, and the digital divide must be addressed by relevant regulatory and implementation mechanisms.

THE CHALLENGES OF THE CHANGING WORLD OF WORK

The disappearance of some sectors together with the automation of certain tasks and the progressive decline of standard employment is a challenge for social security systems. Job fragmentation and career breaks threaten the financial sustainability of social security systems and the adequacy of benefits, which contributes to rising inequality and may negatively impact social cohesion and resilience. Social security institutions and governments need to take action against the erosion of financing and tax bases while also extending coverage to casual and atypical workers that have traditionally been excluded from contributory schemes.

The rise of non-standard forms of employment generates uncertainty in the application and enforcement of labour and social security laws as the traditional notions of employer and employee are put into question and the outsourcing of work becomes more commonplace. In the absence of a labour framework, this may lead to abusive contractual arrangements. In most cases, online platform workers are considered self-employed and consequently do not have the same levels of protection as employees. However, where tribunals have found that self-employed status has been used to conceal an employment relationship, the online platform has been recognized as the employer and workers have become entitled to full coverage. The option of a third category of worker, for platform-based labour only, is also under consideration. There is concern that this may result in negative consequences, such as the potential circumvention of mandatory regulation and legal arbitrage.

Advanced digital and mobile technology with its seemingly unlimited possibilities of new delivery and production models has started to change the way services are provided. Mobile phones become personal identifiers and a means to receive social security benefits and drones may soon bring medical supplies to places where transportation infrastructure is non-existent. While recognizing that there is no one-size-fits-all solution, it is noteworthy to observe joint efforts by institutions, governments, social partners and various stakeholders to tackle the challenges with a view to achieving long-term inclusive growth and sustainable development.

RESPONDING TO THE DIGITAL ECONOMY

Social security programmes need to adapt to extend and ensure effective coverage to the most vulnerable in the labour market, including atypical workers, online platforms workers and informal workers. To do so, they must address the challenges of incomplete and fragmented work histories.

Some countries have already adjusted contributory programmes to reflect the incomplete work histories of an increasing share of workers. Belgium has relaxed minimum thresholds for mandatory social insurance programmes to facilitate the coverage of online platforms workers, given the mismatch between the levels of contributions required for full coverage and the effective ability of those workers to achieve such levels. Other solutions may envisage the deferral of contributions during economic crises, interruptions in contribution periods, and the use of broad income bands for the determination of contribution levels.

Voluntary schemes can also play a role in complementing mandatory schemes. However, there is a risk of adverse selection, as the workers most exposed to risks have the greatest incentives to join, making risk pooling difficult. Consequently, extending coverage through mandatory schemes that include workers with lower contributory capacities has proven to be more effective in terms of coverage and adequacy. This better allows for risk pooling, thereby promoting the financial sustainability of social security systems. In some cases, this requires government subsidies or the introduction of differentiated contributory categories.
The effective implementation of the portability of accrued social security contributions is an important step towards ensuring better protection. In fact, a multifaceted and fragmented labour market with high levels of employee turnover, career interruptions and multi-employer jobs requires that eligibility is maintained throughout the entire career.

Portability is also an essential driver for the extension of social protection coverage. This promotes the freedom of movement of workers while facilitating access to the labour market for those who are most in need of support. In this regard, steps have been taken to increase protection for migrant workers and their families through bilateral and multilateral agreements.

Some countries have implemented innovative solutions that aim at exchanging relevant information between platforms, their workers, tax authorities, local administrations and social security administrations. This is seen in Uruguay, where drivers of transport platforms are mandated to register on a public mobile phone application as a small business with the social insurance agency (Banco de Previsión Social – BPS) and the tax authorities before being allowed to be active on a transport platform.

Potential tax-base erosion is increasing as the world becomes ever more borderless with the rise of digitalization. The Organisation for Economic Co-operation and Development (OECD) estimates that the proportion of global corporate tax revenues lost because of digitalization is 4–10 per cent. To close the loopholes that allow multinational enterprises and online platforms to shift profits to jurisdictions where the tax system is more business-friendly, an effective system of data exchange and horizontal coordination is needed. In United States, online platforms must send information about income earned above a certain income threshold to tax authorities. France has a similar law, wherein online platforms have to provide the tax administration with detailed information annually on platform incomes above a certain threshold.

One way to simultaneously reduce the administrative burdens of online platform workers and increase contribution compliance is to centralize contribution collection. This mechanism has been introduced in some countries on a voluntary basis. In Singapore, some online platforms voluntarily transfer contributions to the social security institution. In France, platform workers may authorize online platforms to make income or turnover declarations as well as to transfer contributions to social insurance agencies on their behalf. In other countries, such as Switzerland, platforms...

“Education and life-long training are fundamental to adapt and thrive in the digital economy”
may automatically transfer social contributions and taxes to the respective public bodies.

Private initiatives may also facilitate the extension of social protection coverage. In Italy, DocServizi is a cooperative of freelancers that provides its affiliates with a wide range of services and benefits. Benefits, including for sickness, maternity and unemployment, are provided upon payment of a subscription fee and a payment based on the monthly turnover of affiliates. In Denmark, the world’s first ever collective agreement between an online platform and a local branch of a trade union, Uniglobal, came into effect in 2018. It considers the platform’s workers as employees and provides them with, among other things, contributions to retirement savings accounts and access to paid sick leave.

Private insurance companies may offer products tailored to online platform workers. In one pilot case, a major insurer has partnered with an online platform taxi service in Europe to provide drivers with access to parental leaves, sickness and injury compensation and a childbirth allowance. Despite the limited scope of such developments – compared with mandatory social security programmes – such initiatives acknowledge a growing awareness of the importance of bridging gaps in coverage.

In a world of rapidly changing skill requirements, professional training and lifelong learning are essential to enable workers to remain active and to move easily between jobs, occupations and sectors. In this context, designing and implementing effective policy interventions that include the most vulnerable, low skilled and less qualified in particular is key to guarantee full participation and to manage the labour market transition. Examples of good practices include China where workers affiliated with unemployment insurance for at least three years are entitled to a lump-sum skills upgrading subsidy once a recognized professional qualification certificate or vocational skills grading certificate is obtained. In Gambia, the Women Initiative Gambia (WIG) has launched skills training and capacity building programs for young women in tailoring and weaving. The WIG is expected to empower thousands of young women, especially in rural communities.

In Singapore, the SkillsFuture Mid-Career Enhanced Subsidy covers up to 90 per cent of course fees for over 8,000 designated courses and is paid to Singaporeans aged 40 or older to encourage mid-career up-skilling and reskilling. In 2019, Hong Kong (China) improved an information technology (IT) scheme for people who are visually impaired, particularly for those who require high-performance IT for the purpose of studies or employment.

Training for conventional forms of work is no less important. In Turkey, the Turkish authorities in collaboration with the German government and local partner organizations have introduced a training course for refugees as well as the local population. This has enabled many refugees in particular to acquire skills for manual trades and to put this knowledge into practice in small- and medium-sized enterprises.
INNOVATION: BRIDGING THE DIGITAL DIVIDE BY STRENGTHENING DIGITAL SKILLS

Belgium created a fund in 2017 to invest in the future skills of its workers and younger citizens. The Digital Belgium Skills Fund has aimed to bridge the observed digital divide by strengthening digital skills.

With an initial EUR 18 million put in place over a three-year period, the Fund will finance projects that focus on developing the digital competencies of vulnerable children, youth and adults younger than age 30.

The Fund’s objectives have been defined, on the one hand, through recognizing the fascination that the younger generations in particular have for new technologies and, on the other hand, through an acknowledgement that they often do not have the financial means to develop their talents in this important area.

For all citizens, it has become increasingly important, indeed fundamental, to be able to communicate easily using digital tools, such as personal computers and smart phones, with public agencies and service providers. In the workplace, or even among jobseekers, the same need to make personal contacts, to share information and to communicate more generally, is apparent.

The Fund aims therefore to make a step towards offering all members of society equality in opportunity to develop, at a minimum, the core digital skills required to actively participate in society.

Skills development will extend to issues of online security and even to learning basic coding skills. A deeper development of competences may also be possible for selected young talent to meet employer demand and also for those who have the ambition and potential to become digital entrepreneurs.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Social security programmes need to adapt to provide coverage for a wide range of circumstances in people’s working lives.

Portability, defined as the ability of an individual to carry their entire work and contribution history across jobs and jurisdictions, is a key enabler to the provision of continued coverage.

Legal frameworks and financial models should be adapted to new forms of work to enable effective access to adequate and sustainable social security protection.

Significant investments in education and skills (re)training are necessary to prepare the labour force of the future and support workers through labour market disruption.
DECLINE OF STANDARD EMPLOYMENT

1 in 3
Workers are self-employed or freelance in the United States

1 in 3
Workers are self-employed or freelance facilitated by peer-to-peer online platforms in Australia
Source: www.news.com.au

NEW SKILLS

1 million
Projected EU labour market demand for IT specialists in 2020
Source: Friedrich-Ebert-Stiftung (2016)

95%
Nearly all workers in the United States believe reskilling is essential to keep working
Source: Accenture (2017)

THE FUTURE OF WORK

5%
of current jobs
In 2019, one in twenty of existing jobs are at risk of being fully automated using current technologies

60%
of occupations
By 2050, about 30% of the tasks associated with 60% of occupations may be automated
Inequalities across the life course

Social security programmes enable income redistribution, maintain economic demand, and support balanced economic growth. They also contribute to addressing structural inequalities, such as between genders or in access to labour market opportunities, as well as socio-geographic barriers, and thus help strengthen social cohesion. By addressing inequalities, social security programmes enable people to mitigate risks and more fully realize their potential across the life course. Yet, in spite of the extension of social security coverage, globally inequalities have increased. To address all forms of inequality, interventions should be focused at different stages of risk, involve different stakeholders, and be proactive.

On a global scale, the income gap between countries has been reducing. At the same time, within-country inequality has been increasing. This is of concern given that in-country inequality, which is often typified by an increasing concentration of wealth, creates a perception of growing injustice in society and presents a threat to social cohesion and economic growth. In some countries, rising inequality has fed civil unrest and challenged the political order. A common demand is for a greater redistributive role to be played by the State, orchestrated through the national tax system and supported by the social security system.

| CHALLENGES TO SOCIAL COHESION |

The factors driving inequality in society are varied. To effectively reduce and mitigate their impacts, an understanding of these different factors is important. One key driver is the changing labour market, which has led to an increasing variation in career paths and outcomes. Despite the positive global economic growth of recent decades, employment in the
informal economy remains the norm in the majority of countries, while employment in non-standard forms of work is increasing in more developed economies.

There is great disparity in the numbers of hours people work. More than one in three workers globally regularly work more than 48 hours per week, while another 20 per cent of the global workforce are engaged in part-time employment. Thus more than half of the global labour force does not work the “standard” range of 35–48 hours of work per week. This particularly impacts younger workers and women, groups who are often less able to manage uncertainty and economic shocks.

Other forms of inequality are no less preoccupying. Although the gender gap has closed slightly, unjustifiable differences in the treatment of women remain. In the workplace, discriminatory practices continue, such as lower salaries than men for the same job, more precarious contracts, and the male dominance of senior level posts. This bias in favour of men translates into lower contributory pension entitlements and worse mental health outcomes for women on average. Accessing benefits and services may also be more difficult for women.

While certain advances have been made in the treatment of people with an assessed disability, there is still widespread discrimination against those with mental health issues. Despite progress, there remains a strong link between being disabled and the risk of poverty. Racial discrimination (for example against indigenous populations and certain migrant groups) continues, and the acquired rights of the LGBTQ+ community remain fragile.

**RESPONSES TO SUPPORT SOCIAL COHESION**

While structural inequalities in society are typically resistant to significant and rapid change, social security systems can and do make important contributions to help address inequalities. To be most effective, programmes and services need to be designed and financed in a manner that addresses, both, the drivers and outcomes of inequality. Also, given that the nature of risk is changing, social security institutions need to reflect this change in the ways they intervene.

The response of social security systems should be two-fold. First, to provide universal and adequate benefits to meet the contingencies of specified life-cycle and labour market risks (e.g. old-age, child-birth, disability, and unemployment) that implicitly target those social groups most likely to be impacted by these risks. Second, to provide benefits and services that explicitly target vulnerable or disadvantaged groups. Such benefits may be tailored or targeted to those who would benefit most (e.g. through means-testing or minimum benefits).

The financing of contributory approaches can also aim at reducing inequalities. For example, for workers with low earnings, earnings up to a certain limit can be excluded from contribution requirements but included in determining the amount of benefits provided. For higher earning workers, the contribution ceiling on earnings may be set higher, but the maximum benefit may be capped.

Factors that contribute to inequalities can be complex and multi-dimensional and these may also be key drivers in the development of income inequality. Responses in this regard often involve improved accessibility to services (e.g. health, education, employment opportunities, and social support) and improvements in the quality of services received.

**Focus on universal benefits.** Placing the focus on affordable levels of universal benefits can be effective in meeting policy goals and administratively efficient. For example, a minimum fixed-rate basic pension provides important support for all, and also reduces inequalities. Targeted measures can complement such a framework to provide additional relief that would otherwise be unaffordable were they universal. An example is the income-tested Older Person’s Grant in South Africa, which is estimated to have significantly reduced income inequality, with a reduction in the Gini coefficient from 0.77 (without grants) to 0.60 (with grants).

**Improving prevention measures, particularly for health.** Globally, the origins of state health interventions lie mainly with
public health prevention measures (e.g. improved sanitation, mass vaccinations, access to clean water and sanitary facilities, improving public hygiene, and anti-pollution measures, etc.). Not only have such measures been extremely effective in reducing mortality they are also cost efficient.

The development of many health systems has focused more on treating the symptoms (curative) while relatively overlooking the underlying causes (prevention), such as is the case for diabetes. Not only is such an approach unsustainable but it does not increase well-being in society, and it exacerbates inequalities. However, an encouraging trend is the proactive responses of many systems to the growing incidence of noncommunicable diseases. For example, the SOCSO Health Screening Programme in Malaysia includes a public awareness campaign and a primary prevention health screening programme. The State Employees’ Social Security and Social Services Institute programme (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado – ISSSTE) in Mexico is geared to the prevention and reduction of obesity, with an emphasis on balanced nutrition and physical exercise.

**Working with other stakeholders.**
In programme delivery, it is important that duplication of effort is avoided, an alignment of incentives is achieved, and that stakeholders take on responsibilities where they have the required competencies. This means that social security administrations should work with employers, trade unions, NGOs, as well as with government departments and local governments. All national, and in some cases cross-border, policy matters should seek to be coherent and to treat all persons in an equitable manner based on decisions that are transparent and rights-based. This will increase trust in the social security system, thus strengthening its capacities to address inequalities and support social cohesion.

**Focus on vulnerable populations.** User-centric social security programmes acknowledge that all individuals and population groups have specific needs. By better understanding the risk issues faced by individuals and groups, and by more fully identifying people’s needs, appropriate responses can be tailored. For instance, some interventions to overcome the structural inequalities found in many societies that further disadvantage vulnerable populations include benefits for rural workers, parental leaves, and protecting migrant workers’ accrued social security rights and ensuring their portability.

Broader access to social security programmes makes society more inclusive, reducing the vulnerability of some population groups, thus strengthening social cohesion. An example

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“Social security can and must play its role in reducing all forms of inequality”
is the establishment and operation of workers’ health centres by the Korea Occupational Safety and Health Agency (KOSHA) to promote health for vulnerable groups.

**Financing issues.** Robust financing is essential for providing adequate benefits. As a consequence of the stagnation of real wages in particular among lower-paid occupations, the shift in wealth over the last two decades from labour to capital, the emergence of digital mega-firms that can easily move profits to a lower tax environment, and even the sometimes contested employment status of online platform workers, it is important to widen the financing base. Greater consideration should be given to the contributions that can be made by general taxation, sales tax or other specific and ring-fenced measures.

The structure of social security contributions is also important – in Brazil, for example, employee contribution rates depend on salary level (from 8 per cent at lower salary levels up to 11 per cent for those on higher salaries), which proves an effective redistributive measure.

**Housing and childcare.** Housing is a policy area where social security has played a limited role, but this looks likely to change. In the last 25 years, house prices have increased at more than triple the rate of median incomes in many high-income economies. Also, given the heightened attention being given to the poor quality of some private rented housing stock, the investment of social security reserve funds in social housing is a growing phenomenon. To mitigate risk and invest in human capital across the life course, a major step would be to give all families with children access to affordable decent housing.

Breaking the cycle of intergenerational poverty can be difficult. Achieving upwards social mobility is often impossible. This has led to a higher importance being accorded to interventions that target vulnerable groups from infancy. Starting from the premise that a healthy pregnancy and childhood are prerequisites for a healthy life, subsequent needs are for a secure childhood, healthy nutrition, disease prevention, adequate physical activity, a healthy living environment, and quality education.

At all times, social policy design and delivery should be coherent, with effective coordination and communication between the different stakeholders. Childcare offers an instructive example. In the absence of affordable public childcare, the high cost of private childcare in some countries is not only an obstacle to, typically, mothers returning to productive full-time paid employment, but it exacerbates inequality. For instance, it can result in lower earnings, lower social security contributions and lower future contributory benefits levels. Effective measures include paid maternity and paternity leaves and job protection. While in 1994 only 40 countries reported statutory maternity leave programmes, by 2015 leave entitlements for fathers were provided in at least 94 countries out of 170 for which data were available.

**Integrated social policies.** In many countries, the goal of achieving a fully integrated system of social policies, including those of social security, is work in progress. The impacts of different social security programmes should be considered holistically. For instance, unemployment insurance can improve mental health outcomes, while retirement income can have trickle-down positive impacts for households. For example, the universal old-age pension in Georgia has reduced child poverty by 69 per cent. Also to be taken into account are the possible “winners and losers” of reform. For instance, an increase in normal retirement ages must take into account those working in physically and mentally demanding professions. In France, the right to full retirement benefits depends on length of service and age thereby facilitating, when appropriate, earlier retirement from such professions.

For the vast majority, e-administration improves accessibility, overcomes geographic barriers and improves the effectiveness and efficiency of integrated programme design and delivery. However, care must be taken to mitigate the risk of the exclusion of those who have limited access to the Internet or who are not digitally literate.
INNOVATION: PROMOTING THE INCLUSION OF ALL PEOPLE

People living in geographically remote areas tend to be confronted by a number of challenges that limit access to social security protection. Geographically remote areas are commonly less urbanized, more rural, and these communities may have low and fluctuating average incomes, have access to less developed infrastructure and public services (e.g. education, health), and, in many countries, are home to indigenous peoples who may have distinct linguistic and cultural traditions from those living in urban centres. Generally, indigenous people endure a number of inequalities, including social stigmatization and discrimination, as well as being relatively excluded from economic development possibilities.

To respond to challenges such as these, the National Social Security Administration (Administración Nacional de la Seguridad Social – ANSES) in Argentina, instituted a programme, "Bienestar para Nuestra Gente" (welfare for our people), to ensure that indigenous and rural communities fully exercise their social security rights from an integrated perspective.

To strengthen access to social security benefits and to inform people about their rights, the programme in Argentina includes activities promoting inclusion and outreach and offers practical training to indigenous leaders and members of their communities at large. The programme goals include:

- To enable indigenous people and vulnerable rural communities to exercise their social security rights.
- To provide institutional access channels that make it easier to carry out procedures and obtain benefits.
- To train community leaders in how to use IT and the ANSES website through which to access benefits and services and make enquiries.
- To coordinate measures with public and private organizations, extending and facilitating networking.
- To valorize the contribution made by indigenous people to the country’s socio-economic heritage.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

Social security programme design and coordination should consider inequality impacts from multiple perspectives.

Social security programmes can proactively confront structural inequalities across the life course, including breaking the cycle of intergenerational poverty.

Satisfying the human right to social security implies that the different needs of different population groups must be taken into account.

Care must be taken to avoid creating a new form of inequality: a digital divide.
**INCOME INEQUALITY**

26
The world’s wealthiest 26 people own the same wealth as the poorest 50% of humanity
Source: Oxfam International (2019)

USD 2.5 billion
The combined daily increase in the wealth of the world’s billionaires in 2018

4%
Global tax revenue that comes from taxes on wealth in 2018

**INEQUALITY IN HUMAN CAPITAL**

25%
Worldwide, nearly one in four children younger than age 5 are malnourished

260 million
Worldwide, the number of children and youth not attending school

1,000 days
To fully realize human potential, nutrition and care in the first thousand days of a child’s life are essential

**GENDER INEQUALITY**

USD 10 trillion
Estimated global value of unpaid care work done by women in 2019
Source: Oxfam International (2019)

23%
Global average wage gap between men and women in 2017
Source: UN Women (2017)

<20%
Globally, less than one in five business managers are women
New risks, shocks and extreme events

In a world where risks are multiple and interconnected, risk impacts have become less easy to predict. Social security systems, whose main objectives are to respond to life-cycle and labour market risks, can also help attenuate the downside impacts of new external risks and, where feasible, seek to reduce their frequency and severity. Following a shock, the protection provided by social security programmes enables societies to recover more rapidly and to be better prepared for future events.

While different global regions are exposed to different environmental, social, health, political and economic shocks, the frequency and severity of such shocks are increasing. At the same time, new risks and sources of external shocks for social security systems are emerging. New risks and external shocks exacerbate the uncertainties associated with the conventional life-cycle and labour market risks covered by social security systems.

In response to this growing uncertainty, social security programmes’ roles in managing risk increasingly extend beyond the traditional reactive (income security and rehabilitation) and preventive roles associated with life-cycle, income security, health and employment risks. The evidence underlines that social security systems continue to develop and strengthen their expertise in managing risk.

As the basis for good practice, social security institutions should track risk developments in a phased manner, first during a planning and preventive period to identify potential shocks and reduce their possible impacts. The next steps should be the delimitation of the institution’s role during the shock itself and, thereafter, its follow-up role. Follow-up is important because although shock events may be short in duration, their negative impacts can be much longer lasting, and in some cases enduring.

NEW CHALLENGES FOR SOCIAL SECURITY

In a global context of uncertainty, a continuing role for public social security programmes rooted in the principles of solidarity, insurance and equity is necessary. This is confirmed by looking...
at a number of potential new risks and shocks facing social security systems.

**Climate change and natural disasters.** The four hottest years on record have been 2015 to 2018, with 2019 expected to continue this trend. While the increase in the average global temperature has negative effects on the economy (i.e. greater agricultural yield volatility), extreme events also have significant impacts on populations (health outcomes, migration of diseases). Record droughts in Africa and Australia, deadly flooding in both North and Latin America and increased typhoon activity in South East Asia, for example, all directly impact the health and well-being of households and people’s livelihoods and, thus, the work of national social security programmes.

Increasingly, these impacts will require multilateral responses. At the human level, United Nations projections suggest that there will be 250 million climate migrants by 2050. International movements of climate migrants will include many people of working age, thus increasing the likely demands made of existing bilateral and multilateral social security agreements, and perhaps prompting the need to develop new cross-national agreements.

**Environmental degradation.** More people are estimated to die as a direct result of air pollution than from smoking tobacco while the possible scale of the longer-term health, environmental and economic effects of plastic pollution in the world’s oceans is only now starting to be understood. On agricultural land, soils have been contaminated by a mix of pesticides and antibiotics while many urban and industrial landscape have been tainted by heavy metals. The issue of volatile as well as safe water supplies is now becoming more prominent.

**Economic shocks.** The economic cycle is such that contractions are deemed inevitable, and periodically their reach will be global. A decade on, real wages in many countries still remain lower than they were before the 2007/08 global financial and economic crisis. Although employment levels have improved, many current jobs are precarious, part-time, or irregular, and self-employment and non-standard forms of work have increased. Across the recent period, household incomes have stagnated and the cost of essential goods have increased, leading to the relative impoverishment of middle- and lower-income groups. This has heightened the demands placed on social security systems but has also negatively affected the contribution base on which social security is financed.

The digital economy is a slowly evolving shock that will increasingly impact patterns of employment and the organization of work. In the absence of regulatory reform and institutional adaptation, this will continue to put into question the conventional design, financing and reach of labour regulation and many social security programmes. Not only will work become increasingly non-standard but workers and their dependants will be more exposed to risk and precarity.

**New emerging health challenges and shocks.** The growing incidence of noncommunicable diseases is a global trend. One particular concern is a rise in mental health issues, especially among younger cohorts. As a positive global indicator, we are now approaching the longest period between influenza pandemics in the last 300 years. There is concern that the preventive achievements of medicine such as this may be threatened by the growth of the, so-called, antivax movement, which appears impervious to the heightened risk that non-vaccination against health risks poses, particularly to vulnerable populations such as the very young and the elderly and frail.

**Labour market transformation.** The increasing fragmentation of work, the evolving nature of labour markets and low rates of wage growth all negatively affect the financial equilibrium of social security programmes, the economic security of covered people as well as the well-being of individuals, families and households. In many countries, the size of the informal sector has not reduced over the last 50 years. Underemployment may mask unemployment.

The precarious reality associated with the growing occurrence of non-standard employment often results in fragmented and incomplete contribution histories and thus low levels of contributions upon which benefit entitlements are calculated. In some cases, low contribution density may result
in workers being ineligible to receive rights-based contributory benefits. This could increase demands on, typically less generous, tax-financed social assistance programmes.

**Changing political environment.** Higher and growing levels of societal inequality feed growing dissatisfaction among populations, which can undermine a long-term national perspective and favour a patch-work of populist short-term solutions. This may be at odds with social security’s principles of universalism, solidarity, redistribution and equity.

### RESPONDING TO NEW RISKS

In spite of operational and financing constraints and external pressures, social security institutions have shown to be capable of adapting to risks, thus highlighting that innovation has become a critical operational attribute for quality service delivery.

**Climate change and natural disasters.** Institutional responses should reflect not only the growing number of extreme events that have direct, short-term and often life-threatening impacts (e.g. flooding) but also those with longer-term impacts (degradation of health status, viability of the dominant business model, etc.). As one response, in Fiji, which is highly exposed to tropical cyclones, the Fiji National Provident Fund is now mandated to provide assistance to its members when dealing with natural disasters.

A number of institutions are considering rebalancing their portfolio of reserve fund investments with a move towards a reduction in exposure to fossil fuels. The positive side of this is an increase in investment in social housing, renewable energy and public transport.

**Economic and financial shocks.** Universal benefits are particularly important to mitigate basic risks and to ensure that the most vulnerable population groups are protected.

Another lever is the investment management of social security reserve funds where the pursuit of social investment, such as in national infrastructure projects, may be beneficial. Jordan’s Social Security Corporation has adopted sustainability reporting, obliging it to disclose results in terms of economic and financial aspects as well as of their environmental and social impacts.

**Health risks.** The increase in the prevalence of noncommunicable diseases can be considered a new risk but also a shock. Coupled with changes in family structures, this has direct cost implications for health systems and care provision. A number of preventive measures seeking to reduce risk through encouraging healthier diets, earlier detection methods in

“Social security programmes mitigate risk and increase resilience to shocks”
healthcare and preventive health check-ups, promoting reductions in toxic emissions and pollution, as well as endorsing more physical exercise can be observed internationally, from Malaysia to Mexico and from South Africa to Sweden.

The National Social Insurance Fund for Employees (Caisse nationale des assurances sociales des travailleurs salariés – CNAS) in Algeria has put in place an online prior medical examination to permit more rapid access to prescribed medication for insured persons living in geographically remote areas.

Formal long-term care provision is still relatively rare at a global level, so investing in care is important given the large numbers of people (usually women) carrying out informal caring responsibilities. To extend training to the caregivers of older persons, Mexico’s State Employees’ Social Security and Social Services Institute (Instituto de Seguridad y Servicios Sociales de los Trabajadores del Estado – ISSSTE) offers a multimedia course via its public institutional portal, which offers information related to the care of people with dementia.

To complement formal care, the development of ageing-in-place policies is a priority.

Changing political environment.

The regulatory and institutional legal framework of a social security institution should ensure a degree of independence and autonomy, irrespective of political changes at the national level. The ISSA Guidelines on Good Governance supports institutions in this endeavour. Also, the ISSA Guidelines on the Investment of Social Security Funds sets out the principal structures and responses to situations, such as when certain investments are imposed on the social security institution’s reserve fund.

To counteract possible negative public opinion directed towards social security institutions, as well as to minimize the personal stigma often associated with the receipt of some benefits, improved communication and positive messaging can strengthen public understanding and increase the perceived value of social security for the population.

Extreme event or shock. Effective and robust delivery systems are essential in instances where traditional infrastructure may be affected by an extreme event or shock. While e-services are important and can often be scaled up in crises, their continuity has to be ensured in the event of interruptions to the supply of electricity and network connections, and to prevent data loss and hacking. International good practice is this regard is established in the ISSA Guidelines on Information and Communication Technology.

With increasing dependency on digital solutions for all aspects of the delivery of social security, in the event of a loss of electrical power, alternative powers sources should be envisaged, such as generators, and satellite and wireless communications channels considered. Mission critical infrastructures should be the subject of rigorous business continuity planning and fail-safe approaches, including contingency recourses and plans that extend to methods and measures that may no longer be mainstream.

The response to shocks and emerging risks must include a number of different coordinated measures and the involvement of a range of stakeholders. Responsibilities should be determined and goals identified from the outset. When shocks do occur, it is important that responses across networks avoid the duplication of effort and the unnecessary use of resources. Tailored ad-hoc measures may also be needed to respond to the specific impacts of shocks. However, it is worth restating that effective responses to shocks will typically require a reactive element to address immediate needs and a preventive element to reduce future risk and mitigate the severity of impacts.
Social security institutions are adapting benefits, services and management processes to reflect the new reality of risk.

**Climate change**

**Argentina.** Thunderstorms, floods and forest fires are becoming more common. To reduce the economic impact of such events, a number of presidential decrees have provided for a temporary doubling in the amount of family allowance, unemployment benefit and pension payments to socially vulnerable groups seriously affected by these natural phenomena.

**Brazil.** The *Bolsa Verde* provides payments to vulnerable groups in return for behaviour and economic activity that is supportive of the environment, such as soil and water preservation.

**The Philippines.** The social security system provides short-term support, such as grants and advance pension payments, for people affected by typhoons.

**Risk management**

With support offered through dedicated risk management sections in the *ISSA Guidelines on Good Governance* and the *ISSA–ILO Guidelines on Actuarial Work for Social Security*, risk management expertise has developed considerably within social security institutions. This is reflected in dedicated risk functions, a documented and monitored risk management process, the establishment of risk registries with associated risk owners, and stakeholder buy-in to the process. Some examples include the implementation of integrated risk management in Indonesia’s National Health Social Security programme; Malaysia’s StartSAFE, a doorstep programme for small and medium enterprises in building risk management capabilities; in Uganda, the National Social Security Fund’s “enterprise-wide risk management” approach provides a framework to manage risk; while the National Insurance Board of Trinidad and Tobago has implemented a risk management framework in collaboration with other Caribbean institutions.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

The challenges posed for social security systems can, in many instances, be addressed by the innovative adaptation of current institutional structures.

The capacities of social security systems to successfully alleviate the impacts of risk events will depend on the scale and duration of such risks.

Conventional risk pooling in social security programmes works well for risks that impact relatively few in the community (unemployment) as well as those touching the majority of the population (retirement, medical). Risk management processes need to be fit for purpose for new risks (environmental disasters).

In anticipating how to manage new risks and future shocks, a coordinated and coherent role for public finance should be part of the risk management framework.
EXTREME EVENTS AND CLIMATE CHANGE

>1.6 billion
People affected by protracted crises and left without access to basic health care in 2019
Source: WHO (2019)

60,000
Additional deaths annually due to weather-related disasters

250,000
Projected additional deaths annually due to climate change (2030–2050)
Source: WHO (2018)

THE COST OF RISK IS RISING

USD 650 billion
The global estimated cost of climate-related disasters (2016–2018)
Source: CNBC.com (2019)

83%
Natural disasters (1980–2016) were the major source of monetary losses reported in the European Union
Source: European Environment Agency (2018)

CYBERSECURITY RISK

USD 5.2 billion
The likely global cost of cybercrime for enterprises in the coming 5 years
Source: Accenture (2019)

38%
Proportion of global cybercrimes originating in Europe
Source: ThreatMetrix (2018)
CHALLENGE 10

Migration
Protection of migrant workers

Analysis of developments concerning migrant workers and their access to social security protection presents three observations. First, labour mobility among both internal and external migrant workers is increasing. Second, migrant workers, men and women, contribute significantly to national economic development, not least in helping to address labour shortages in certain sectors, and can be net contributors to social security. The job roles of migrant workers are evolving away from being mainly confined to low-skilled employment. Third, innovative social security policy efforts to extend coverage to formal migrant workers rely more and more on digital tools and international agreements.

International migration is viewed as an integral part of global sustainable development. Given that there are more than a billion domestic and international migrants worldwide, the growing number of migrant workers poses challenges to social security systems.

**Migration Impacts and Challenges**

According to the International Labour Organization (ILO), the number of international migrant workers is increasing, with over 150 million worldwide. Once seen primarily as a South–North issue, the global nature of migrant flows has changed – the third largest migration corridor in the world is Bangladesh–India.

In many regions, debates about population movements often focus more on refugees than on formal migrants. The important social needs of refugees and asylum seekers (housing, education, income support, language courses, etc.) may not be addressed by social security institutions; rather, other public agencies may have this responsibility.

Globally, formal migrant workers tend to be those who have the financial means to move within a country or region, are usually in the cohort aged 20–39, have completed...
their education and are economically active. The average age of migrant workers tends to be younger than the average age of the host population, which is important for countries looking to rejuvenate their demographic profile. The case of Africa is noteworthy — Africa has a young demographic profile, with 60 per cent of the population younger than age 25, including 200 million people aged 15–24. By 2045, the projected number of young people will double. In spite of this, rates of underemployment and unemployment among young workers is high. Presently, almost 80 per cent of young Africans who have found employment work in the informal economy. In the absence of the creation of suitable work opportunities for a growing number of young workers, economic migration is likely to become a life choice for many.

The number of internal migrants, within national frontiers, is likely to continue to grow as well. This is particularly evident in Asia and the Pacific, and presents particular challenges for large countries which have a federal structure, multiple cultures and language groups, and a fragmented social security system. In China, for example, around 40 million peasant farmers have become internal migrant workers. In equally populous India, about one in five workers is an internal migrant.

In the context of demographic ageing, migrant workers represent an important economic, demographic and social resource and their effective integration into the formal labour market can benefit the local economy and social security financing. Migrants positively support the host country by bringing skills and competencies that may not be available or may be lacking, and migrant workers are also often entrepreneurial and hard-working. The impact of migration on economic sectors is illustrated by the case of Panama where close to 80 per cent of migrant workers are involved in trade, construction, domestic work, hotel work, restaurants, manufacturing, professional and scientific activities and administrative activities.

International trends such as population ageing, the increased participation of women in the labour force and inadequate public care services in developed countries all contribute to a growing demand for domestic workers and caregivers for children, the frail elderly and those in poor health or disabled. As a result, many women in developing countries leave their dependants to work as caregivers and domestic workers in more developed countries. This can lead to care deficits in migrant-sending countries. Caregiving work, predominantly undertaken by women, is commonly a vulnerable form of work, and can expose workers to the risk of exploitation. The remittance flows from the earnings gained from such work can provide vital income for workers’ households left behind in migrant-sending countries. These may help reduce the exposure of family members to other risks and vulnerabilities.

**SOCIAL SECURITY RESPONSES TO MEET MIGRANT WORKERS’ NEEDS**

The human rights rationale for the social protection and equal treatment of migrant workers is clear. For economies, there are also many positive trade-offs. Migrant workers pose a number of administrative challenges for social security institutions that can stem from having short employment careers in the host region or country, frequent job changes and, for some, atypical labour patterns and even periods of activity in the informal economy. These challenges are surmountable, however.

**Formal migrants, employment and demographic change.** Migrant workers make a significant contribution to solving emerging challenges associated with projected labour supply and demand in national economies. In the Europe region, as in other regions, there is unmet employer demand for workers with the appropriate qualifications and skills. As one response, the European Union (EU) issues a special residence and work permit (the EU Blue card) to highly qualified non-EU workers. Based on EU experience, a number of Eurasian countries have introduced similar measures to attract qualified foreign labour. Azerbaijan, Kazakhstan and Russia are three examples.

Seasonal workers, who are most often employed in agriculture, horticulture and tourism, are active in many national labour markets. These migrant workers often face difficult working conditions and the risk of exploitation,
which can threaten their health and safety. This fact prompted the EU in 2014 to adopt a Directive on the conditions of entry and stay of third-country nationals seeking seasonal work.

**Protecting migrant workers.** Formal migrant workers often have limited or voluntary access only to social security coverage under the host country social security system. Increased levels of formal coverage and access to occupational safety and health (OSH) provide rights to key benefits and services with other positive spin-offs. Coverage for migrants promotes social cohesion, economic growth and public support for social security programmes, while the potential for the exploitation of migrant workers is reduced, and workers’ mobility increases. Migrant workers are often net contributors to national social security programmes.

Domestic workers comprise a significant part of the global workforce in informal employment and are among the most vulnerable groups of migrant workers. Globally, the ILO estimate that close to 75 per cent of all domestic workers – around 8.5 million workers – are women. In order to strengthen the position of domestic workers, a number of international and national initiatives have been put into place.

The increasing use of ICT in social security management is important for information sharing and data exchange. ICT costs can be prohibitive for some countries, however. An administrative challenge for migrant workers in some countries is the continued use of paper documents, owing to the absence of electronic files that can facilitate the rapid and effective cross-national coordination and administration of benefit claims. Among other challenges that can hinder the coverage of migrants are cross-country differences in concepts, terminology and procedures of social security, political and legal barriers, and the availability of data.

Labour movements within national frontiers, especially of large federal countries, can also create administration challenges. One objective of India’s Aadhaar biometric ID system is to enable seamless access to social protection for the country’s increasingly mobile labour force.

A number of responses are available to improve legal and effective access to social security coverage for migrant workers. One is the relaxation of eligibility requirements, for example, changing a citizenship requirement for access to one of meeting a residence criteria. For all such changes, effective public communication to inform migrant workers of their social security rights is necessary. For example, the National Pension Service of the Republic of Korea provides tailored pension services for foreign workers.
With estimates of over 40 million migrant workers in the Americas, a number of specific responses can be observed. For instance, the authorities in Brazil promote regulated migration channels for workers from Haiti and distribute visas to migrants. Argentina’s national labour regulation programme provides for a temporary reduction of employers’ contributions for migrant workers and facilitates the registration of workers.

Costa Rica requires all foreign workers residing in the country to register with the Social Insurance Fund of Costa Rica (Caja Costarricense de Seguro Social – CCSS). In Saudi Arabia, the General Social Insurance Organization registers foreign workers on arrival in the country. Social security is extended to nearly 100 per cent of the migrant workers that make up more than 80 per cent of employment in the country’s private sector.

**International social security agreements.**

The most important international legal mechanisms to protect the social security rights of migrant workers are bilateral social security agreements. First used at the beginning of the twentieth century, these respond to important migration corridors that develop between two countries. Such agreements help to verify the identity and social security rights of migrant workers, including the totalization and calculation of benefits and their portability. They not only establish rules for referral, but also allow for coordination in support of how cases are handled and for communication between stakeholders. The vast majority of the many hundreds of bilateral agreements that exist concern countries of Western Europe.

Moldova is an important example given that more than one million Moldovans (of a total population of roughly 3.5 million) have migrated to work elsewhere in Europe and beyond. Moldova has made significant progress in protecting its citizens abroad, through a growing number of bilateral agreements, including many with EU countries.

Regional agreements to address the multiple needs of migrant workers, as well as to help coordinate national labour markets, health care and social security systems, are also important. One regional response to the health care needs of migrant workers is the European Health Insurance Card (EHIC). The EHIC permits all those who are insured or covered by a statutory social security system of the European economic area and Switzerland to receive medical care in another signatory State.

For the coordination of EU-wide social security, there are five guiding principles: equal treatment regardless of nationality, consolidation of insurance periods acquired under different national systems, export of benefits within the EU, uniform applicable legislation and administrative cooperation, and data exchange between social security institutions.

For regional groups of countries, multilateral social security agreements serve as a platform for promoting closer cooperation. The main examples are the Inter-African Conference on Social Security (CIPRES) in Central and West Africa; the multilateral Ibero-American Convention on social security signed by Spain, Portugal, and 12 Latin American countries; the agreement on social security of the Caribbean community (CARICOM); the MERCOSUR agreement between Argentina, Brazil, Paraguay and Uruguay; the agreement of the Gulf Cooperation Council, and the 2005 Baku Declaration covering the countries of Eurasia.

Regional developments are ongoing. One is the development of a draft agreement on the provision of pensions to workers of the member States of the Eurasian Economic Union, which seeks to replace the 1992 agreement established after the collapse of the Soviet Union.
INNOVATION: STRENGTHENING THE SOCIAL SECURITY OF MIGRANT DOMESTIC WORKERS

Many migrant workers are economically active in areas that tend to be less dependent on a formal employer-employee relationship, which is fundamental to social security system design. This is often the case for the types of care and domestic work performed by many migrant women workers. These types of work, often being poorly regulated by employment laws and regulations, may pose problems for workers’ registration in the social security system.

In 2011, in recognition of the significant contribution of domestic workers to the global economy, and acknowledging that domestic work continues to be undervalued and invisible and is mainly carried out by women and girls, many of whom are migrants, the ILO adopted the Convention concerning decent work for domestic workers, 2011 (No. 189).

In particular, Article 14 of Convention No. 189 outlines that each member State shall take appropriate measures, in accordance with national legislation and regulations, with due regard to the specifics of domestic work, to ensure that domestic workers enjoy conditions no less favourable than those in which other workers are generally protected by social security systems, including with regard to maternity protection.

A number of countries have amended national social security legislation and adapted benefit and contribution structures to widen social security coverage to migrant workers.

In the spirit of the Convention No. 189, the Chilean authorities have taken important steps to strengthen the social security and health protection of migrant women workers. Pregnant migrants living in Chile have access to health services, while the children of migrant workers may enrol in primary and secondary schools.

The Federal Administration of Public Resources of Argentina has established a central register of social security for domestic workers, including migrant workers, thereby granting them the same rights as other workers. The positive effects include a higher level of registered labour, the promotion of employers’ compliance, the assurance of the quality of information available and an increase in contributions and coverage.
KEY MESSAGES FOR SOCIAL SECURITY INSTITUTIONS

With projected higher migrant flows, bilateral agreements remain the most important mechanism for coordinating administrative responses to ensure the portability of migrant workers’ social security rights.

ICT solutions, and a shift away from paper-based records, permit to achieve greater transparency and improved coverage for formal migrant workers.

The sharing of national and regional good practices should be called upon to address the social security, health care and OSH needs of migrant workers.

National social security institutions should tailor benefit programmes and communication strategies to the different needs of migrant worker groups.
MIGRANT FLOWS

258 million
International migrants (2017)
Source: UN (2017)

>60%
The proportion of all international migrants living in either Asia and the Pacific or Europe (2017)

67%
Two-thirds of all international migrants reside in only 20 countries (2017)

CHARACTERISTICS OF MIGRANTS

51.6% 48.4%
More than half of estimated international migrant workers are men (2017)
Source: migrationdataportal.org (2018)

10.8%
Young workers (aged 18–24) constituted a small part of estimated total migrants (2017)

13.9%
Children (younger than age 18) also represent a part of estimated migrant flows (2017)

BILATERAL SOCIAL SECURITY AGREEMENTS

>2,000
Bilateral social security agreements worldwide
Sources: ISSA; ILO/NATLEX

1904
In this year, the world’s first bilateral agreement was signed between France and Italy
Source: ILO (2012)

>50%
Globally, the majority of bilateral agreements include European countries
Source: ILO (2015)