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**Promotion and protection of all human rights, civil,
political, economic, social and cultural rights,
including the right to development**

Visit to China

Report of the Independent Expert on the enjoyment of all human rights by older persons*[,] **

Summary

The Secretariat has the honour to transmit to the Human Rights Council the report of the Independent Expert on the enjoyment of all human rights by older persons, Rosa Kornfeld-Matte, on her country visit to China from 25 November to 3 December 2019. The main objective of the visit was to identify both best practices and gaps in the implementation of existing laws relating to the promotion and protection of the human rights of older persons. In her report following the mission, the Independent Expert assesses, to the extent possible, the implementation of existing international instruments, laws and policies pertaining to the enjoyment of all human rights by older persons in China. In line with her tenure's priorities, the Independent Expert specifically examines the area of automation, assistive and robotics technology.

* The summary of the report is being circulated in all official languages. The report itself, which is annexed to the summary, is being circulated in the language of submission and Chinese only.

** Agreement was reached to publish the present report after the standard publication date owing to circumstances beyond the submitters' control.



Annex

Report of the Independent Expert on the enjoyment of all human rights by older persons on her visit to China

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I. Introduction

1. Pursuant to Human Rights Council resolution 42/12, the Independent Expert on the enjoyment of all human rights by older persons conducted an official country visit to China from 25 November to 3 December 2019, at the invitation of the Government. The purpose of the visit was to identify good practices and gaps in the implementation of existing laws relating to the promotion and protection of the rights of older persons in the country.

2. During her visit, the Independent Expert met with numerous central, regional and local government authorities, including representatives of the National Ageing Office and the National Committee on Ageing, non-governmental social welfare organizations, representatives of academia and universities, private companies and businesses, social workers and volunteers working with older persons. She also met with older persons themselves and the organizations representing them in Beijing, Shanghai and Changzhou. Moreover, she is extremely grateful for the opportunity to meet and engage in Shenzhen with technology companies and researchers working on automation and machine learning, as well as on emerging assistive technologies and other relevant themes pertaining to the digitalization of health and care services for older persons, using integrated big data computing, artificial intelligence and facial recognition technologies.

3. The Independent Expert expresses her sincere gratitude to the Government for its cooperation in ensuring the success of the visit. She is grateful to the United Nations and other interlocutors for their availability and support. She looks forward to continued engagement with the Government and other stakeholders on the issue of older persons and on the implementation of her recommendations.¹ She further expresses her gratitude to the United Nations Resident Coordinator, United Nations agencies and the United Nations Development Programme Resident Representative for their considerable efforts in coordinating this visit, as well as to the Office of the United Nations High Commissioner for Human Rights (OHCHR) and its Special Procedures Branch for their support in the preparation and execution of the visit.

II. Background and context

4. China is unique because it is now facing an age-structural change of unprecedented magnitude. The challenge of this demographic change naturally poses the question of how to address and adapt to its impact. The country has the world's largest older population and 40 per cent of the older persons in Asia.²

5. By the end of 2018, China had 249 million persons over the age of 60, accounting for 17.9 per cent of the total population. Of those, 166 million were over the age of 65. It is estimated that the number of persons over the age of 60 is currently about 255 million. In approximately 2050, the number of older persons in China is set to peak at 487 million, accounting for 34.9 per cent of the total population.³ China is also experiencing a rapid increase in the size of the "oldest old" segment of its population.

6. The demographic transition is among the most rapid ever witnessed. China became an ageing society in 1999 when 10 per cent of the population was over the age of 60,⁴ and it will become an aged society by 2027.⁵ An important driver of population ageing has been the family planning policy – i.e., the one-child policy of 1979–2016 – which accelerated the

¹ See, e.g., A/HRC/33/44; A/HRC/36/48.

² United Nations, Department of Economic and Social Affairs, Population Division. *World Population Ageing 2017* (ST/ESA/SER.A/408), 2017, p. 28.

³ Government submission on the protection of rights and interests of older persons in China, provided on 29 November 2019 to the Independent Expert on the enjoyment of all human rights by older persons, p. 1. The document is on file with the Independent Expert.

⁴ *Ibid.*

⁵ Elena Glinskaya and Zhanlian Feng, eds., *Options for Aged Care in China*, Directions in Development (Washington, D.C., World Bank, 2018), p. 6.

significant decline in fertility, with lasting effects on the country's demography. This declining fertility rate coincided with the broader global trend of extended life expectancy.⁶

7. The pace of ageing also needs to be considered in the context of broader population demographics. China is currently at a point of key shift, from the greatest growth in its working-age population towards a period when its aged population will increase more rapidly while its labour force decreases. This is exacerbated by relatively low statutory pension ages of the Basic Pension Scheme for Urban Employees: 50 years for women at production posts, 55 for women at managerial and technical posts and 60 for men.⁷

8. Women are likely to live longer than men in China. In 1950, the average life expectancy at birth for women and men in China was 44.6 years. By 2030, the life expectancy of Chinese women will be 79 years compared with 76 years for men. While the difference in life expectancy is expected to narrow in most high-income countries, it will further expand in China. In 2010, women accounted for nearly 60 per cent of the population aged over 80 years, and that percentage is set to rise steadily in the next few decades.⁸

9. Moreover, there are large disparities in life expectancy, health status and health service use between older persons of low and high socioeconomic status. Regional differences in health status and life expectancy also exist; for example, older persons living in economically well-developed regions have a higher disability-free life expectancy than older persons residing in rural and/or less developed parts of China.⁹

10. The country is ranked at 52 on the Global AgeWatch Index.¹⁰ It performs best in the enabling environment domain (28) but ranks lowest in the income security domain (75), owing to a high old-age poverty rate (23.9 per cent) and low relative welfare (50 per cent). It faces significant challenges, but it has made progress on age-friendly policies.¹¹

III. Administrative, legal, institutional and policy framework

11. China is party to six of the core international human rights treaties: the Convention on the Elimination of All Forms of Discrimination against Women; the International Convention on the Elimination of All Forms of Racial Discrimination; the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; the Convention on the Rights of the Child and the Optional Protocol on the involvement of children in armed conflict; the International Covenant on Economic, Social and Cultural Rights; and the Convention on the Rights of Persons with Disabilities.

12. Although China signed the International Covenant on Civil and Political Rights in 1998, it has yet to ratify it. In addition, China has not signed or ratified the International Convention for the Protection of All Persons from Enforced Disappearance; the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families; the Optional Protocol to the International Covenant on Civil and Political Rights; the Optional Protocol to the International Covenant on Economic, Social and Cultural Rights; the Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women; the Optional Protocol to the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; the Optional Protocol to the Convention on the Rights of the Child on the sale of children, child

⁶ *Addressing the Challenges of Population Ageing in Asia and the Pacific: Implementation of the Madrid International Plan of Action on Ageing* (United Nations publication, Sales No. E.17.II.F.17); see also www.un.org/en/development/desa/population/events/pdf/expert/24/Policy_Briefs/PB_China.pdf.

⁷ Asghar Zaidi and others, "Active Ageing Index for China: comparative analysis with European Union member States and South Korea", report produced for the European Union-China Social Protection Reform Project, Active Ageing Index for China, (July 2019), p. 16.

⁸ World Health Organization (WHO), *China Country Assessment Report on Ageing and Health* (2015), p. 1.

⁹ *Ibid.*, p. 20.

¹⁰ See data for China at www.helpage.org/global-agewatch/.

¹¹ *Ibid.*

prostitution and child pornography; and the Optional Protocol to the Convention on the Rights of Persons with Disabilities.

13. The State is a party to the Convention on the Prevention and Punishment of the Crime of Genocide, the 1951 Convention relating to the Status of Refugees and its 1967 Protocol, and the 1954 Convention relating to the status of Stateless Persons. It has not acceded to the 1961 Convention on the Reduction of Statelessness and the Rome Statute of the International Criminal Court.

14. China is a party to four out of eight fundamental International Labour Organization (ILO) conventions, including the Equal Remuneration Convention, 1951 (No. 100); the Discrimination (Employment and Occupation) Convention, 1958 (No. 111); the Minimum Age Convention, 1973 (No. 138); and the Worst Forms of Child Labour Convention, 1999 (No. 182). It has also ratified a number of other ILO conventions and submitted recommendations relevant to older persons to the competent authorities, including the Labour Administration Convention, 1978 (No. 150); the Vocational Rehabilitation and Employment (Disabled Persons) Convention, 1983 (No. 159); the Social Protection Floors Recommendation, 2012 (No. 202); the Transition from the Informal to the Formal Economy Recommendation, 2015 (No. 204); the Employment and Decent Work for Peace and Resilience Recommendation, 2017 (No. 205); the Nursing Personnel Recommendation, 1977 (No. 157); the Labour Relations (Public Service) Recommendation, 1978 (No. 159); and the Labour Statistics Recommendation, 1985 (No. 170).

15. China has not ratified the Forced Labour Convention, 1930 (No. 29); the Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87); the Right to Organise and Collective Bargaining Convention, 1949 (No. 98); and the Abolition of Forced Labour Convention, 1957 (No. 105). It has also not ratified a number of other ILO instruments relevant to older persons, including the Domestic Workers Convention, 2011 (No. 189); the Labour Inspection Convention, 1947 (No. 81) and its Protocol of 1995; the Migrant Workers (Supplementary Provisions) Convention, 1975 (No. 143); the Indigenous and Tribal Peoples Convention, 1989 (No. 169); the Social Security (Minimum Standards) Convention, 1952 (No. 102); the Invalidity, Old-Age and Survivors' Benefits Convention, 1967 (No. 128); the Medical Care and Sickness Benefits Convention, 1969 (No. 130); the Paid Educational Leave Convention, 1974 (No. 140); the Rural Workers' Organisations Convention, 1975 (No. 141); the Nursing Personnel Convention, 1977 (No. 149); the Maintenance of Social Security Rights Convention, 1982 (No. 157); the Labour Statistics Convention, 1985 (No. 160); the Employment Promotion and Protection against Unemployment Convention, 1988 (No. 168); the Protection of Workers' Claims (Employer's Insolvency) Convention, 1992 (No. 173); the Violence and Harassment Convention, 2019 (No. 190); and the Violence and Harassment Recommendation, 2019 (No. 206).

16. In 2004, China amended the Constitution to provide that the State respects and protects human rights (art. 33). Chapter 2 lists the fundamental rights and duties of citizens. The Constitution is silent on the domestic status of treaties, including human rights treaties, and their hierarchy in the domestic legal system. According to the Government, China transformed the main contents of these ratified treaties, including human rights treaties, into domestic legislation. In doing so, these treaties are applied by courts through the application of the related domestic laws. In addition, some treaties can be directly applied by courts.

17. Article 45 of the Constitution stipulates that citizens of China have the right to get material assistance from the State and society when they are old. Article 49 stipulates that grown-up children have the obligation to support and assist their parents, and that it is prohibited to maltreat older persons.¹² China has also elaborated the National Human Rights Action Plan of China (2016–2020), which includes a section on the rights of older persons.

18. The complex, multilevel governance spectrum mainly involves three spheres: laws, regulations and policies. Consequentially, ageing law and policy is first determined at the central legislative-normative level, namely through laws enacted by the National People's

¹² Government submission on the protection of rights and interests of older persons in China, p. 2.

Congress and its Standing Committee. Once this has occurred, action can then be taken at the level of administrative regulations enacted by the State Council. Finally, local regulations may be enacted by local People's Congresses with legislative power.¹³

19. In 1996, the Standing Committee of the Eighth National People's Congress adopted the Law on the Protection of the Rights and Interests of Older Persons, which was further amended in 2009, 2012, 2015 and 2018. The Law has 9 chapters and 85 articles to further clarify the rights and interests of older persons and relevant legal responsibilities in terms of family support and care, social security, social services, social preferential treatment, a liveable environment and participation in social development.¹⁴ The law transposes and concretizes the protection of fundamental rights specifically formulated for older persons in the Constitution.¹⁵

20. Since 2012, China promulgated a number of policy documents of specific relevance to older persons. This includes the thirteenth Five-Year Plan for the Development of Ageing-Related Work and the Construction of Pension Service System, the thirteenth Five-Year Plan for Healthy Ageing and the Opinions of the General Office of the State Council on Promoting the Development of the Pension Service System.¹⁶

21. Moreover, the 31 provinces, autonomous regions and municipalities directly under the central government in China have all formulated regulations on the protection of the rights and interests of older persons and/or have taken measures for the implementation of the Law on the Protection of the Rights and Interests of Older Persons. Local laws and regulations are mainly designed by local governments in line with their actual conditions, to conform to local characteristics and to be more specific and easier to operate.¹⁷

22. China established the National Commission on Ageing as a deliberation and coordination body on ageing issues in 1999, with a mandate to coordinate and promote ageing-related work across the country. The Office of National Commission on Ageing was set up to undertake the daily work of the National Commission on Ageing. In 2019, the Central Committee of the Communist Party of China (the Political Bureau of the Party) and the State Council issued a national medium- and long-term plan for actively responding to population ageing, which clarified the strategic target and deployed specific tasks on actively responding to population ageing.¹⁸

23. China has not yet established an independent national human rights institution in accordance with the principles relating to the status of national institutions for the promotion and protection of human rights (the Paris Principles).¹⁹

IV. Independent Expert's main findings

A. Discrimination

24. While China does not have a comprehensive anti-discrimination law that protects all marginalized and disadvantaged individuals and groups in the enjoyment of their rights,²⁰ the Law on the Protection of the Rights and Interests of Older Persons stipulates that discrimination, humiliation, maltreatment or abandonment of older persons is prohibited.

25. Further, under section III of the National Human Rights Action Plan (2016–2020), China guarantees *expressis verbis* the protection of the rights and interests of specific groups, including ethnic minorities, women, children, older persons and persons with

¹³ Ibid.

¹⁴ Ibid.

¹⁵ Ibid.

¹⁶ A/HRC/WG.6/31/CHN/1, para. 64.

¹⁷ Government submission on the protection of rights and interests of older persons in China, p. 4.

¹⁸ Ibid., p. 3.

¹⁹ CEDAW/C/CHN/CO/7-8, para. 16; CRC/C/OPAC/CHN/CO/1, para. 8.

²⁰ E/C.12/CHN/CO/2, para. 14.

disabilities. Older persons belonging to these groups as well as religious minorities and those living in rural areas continue to experience multiple and intersecting forms of discrimination, which affect the full enjoyment and exercise of their human rights, including access to health.²¹ Moreover, deep-rooted stereotypes regarding the roles and responsibilities of women and men in the family and society in China continue to persist.²²

26. Indirect or direct age-based discrimination, or ageism, is a global key societal concern, and although China possesses various mechanisms that generally prohibit discrimination, far more awareness and appreciation of this problem is essential. Furthermore, both the concept of ageism and the term itself, which was coined in 1969 by Robert Neil Butler to describe discrimination against older persons, have no semantic and linguistic equivalent in the very many languages and dialects of China. Combating ageism, which refers to stereotyping and/or discrimination against individuals or groups on the basis of their age, requires a notional translation and its dissemination. This would, in turn, be useful in the development of policies and a law specifically targeting ageism.²³

B. Violence, neglect, maltreatment and abuse

27. Reported limited data suggest the prevalence of various forms of violence and abuse of older persons in China, including abuse of older persons through neglect, followed by economic exploitation and psychological and physical abuse. According to the United Nations Population Fund, for instance, 9.4 per cent of rural and 5 per cent of urban older women suffer from family violence.²⁴ Underreporting, as in many countries, may be due to insufficient awareness, reluctance to reveal the case in order to maintain family harmony and honour, and the perception that the abuse of older persons is a private family matter.

28. Article 49 of the Constitution specifically prohibits the abuse of older persons. Moreover, the Law on the Protection of the Rights and Interests of Older Persons is of particular importance in combating violence, abuse, ill-treatment and neglect of older persons.

29. In 2015, China took a step forward by adopting its first Anti-Domestic Violence Law, which entered into force in March 2016.²⁵ Article 2 of the Law defines domestic violence as physical, psychological or other infractions between family members that is effected through the use of methods such as beatings, restraints, maiming, restrictions on physical liberty as well as recurrent verbal abuse or intimidation. The law sets out principles for preventing and combating violence, but it lacks operability and does not provide effective protection for victims.

C. Education, training and lifelong learning

30. The right to education and lifelong learning is enshrined in article 71 of the Law on the Protection of the Rights and Interests of Older Persons.

31. Since China established the first university of the Third Age in 1983, authorities estimate that some 70,000 institutions have been established by government departments – education, civil affairs and cultural, among others – at various levels across the country, with over 3 per cent of the older persons in China having enrolled last year. While some of the schools are reserved for retired civil servants, others are open to all.

32. Overall, more than 8.1 million older persons in China studied in 62,000 educational institutions for older persons in 2018, and there were more than 350,000 activity rooms for older persons. Tens of millions of older persons participate in community training, distance

²¹ CEDAW/C/CHN/CO/7-8, paras. 46–47.

²² *Ibid.*, para. 24.

²³ Robert Neil Butler, “Age-ism: another form of bigotry”, *Gerontologist*, vol. 9, No. 4, part 1 (Winter 1969), pp. 243–246.

²⁴ See china.unfpa.org/en/news/191125.

²⁵ Government submission on the protection of rights and interests of older persons in China, p. 7.

and other forms of lifelong learning. There are some modern and well-equipped Universities of the Third Age, such as the one the Independent Expert visited in Shenzhen. At the same time, overall resources remain scarce and the Independent Expert notes disparities in development between urban and rural areas as well as among the regions. There is also a need to strengthen departmental coordination, as well as the depth and breadth of social participation.²⁶

D. Adequate standard of living

33. In recent years, China has made remarkable achievements in significantly reducing poverty.²⁷ It has incorporated the alleviation and elimination of old-age poverty into the national anti-poverty strategy and development plan.²⁸ At the same time, deep poverty remains an outstanding issue as further poverty alleviation becomes more and more difficult. As of September 2018, over 670 counties in the country were still poverty-stricken.²⁹ Older persons belong to those groups that are particularly at risk with around 7 per cent living below the poverty line.³⁰ Particularly affected by poverty in old age are older women, older persons belonging to ethnic minorities and older persons with disabilities.³¹ Moreover, older persons living in rural areas enjoy much lower levels of social protection than those living in urban areas.³²

34. The goal of lifting persons living in rural areas out of poverty is enshrined in the thirteenth Five-Year Plan (2016–2020) and all governmental levels and the Communist Party have been instructed to give it the highest priority. The plan, however, does not include specific measures directed at eliminating extreme poverty in urban areas.³³ In order to take poverty alleviation action and ensure that old-age poverty is not overlooked, it would be vital to determine a clear poverty line for the various urban areas, instead of the existing subsistence allowance lines that are set under different standards by different cities.³⁴

35. China has established special preferential policies for older persons focusing on health care, transportation, business services, and museum and cultural activities. These measures are important and of benefit to older persons, and they foster participation and social inclusion. As specific benefits designed for older persons also depend on local regulations, different programmes do not uniformly recognize the definition of older persons set by the law, which includes persons aged 60 or older. There are significant disparities not only between cities, but also depending on the objective of a regulation, and further harmonization is needed.

²⁶ Ibid., p. 17.

²⁷ CERD/C/CHN/CO/14-17, para. 4.

²⁸ Government submission on the protection of rights and interests of older persons in China, p. 11.

²⁹ United Nations Development Programme (UNDP), China Institute for Development Planning at Tsinghua University and State Information Center, *China National Human Development Report Special Edition: In Pursuit of a More Sustainable Future for All: China's Historic Transformation over Four Decades of Human Development* (Beijing, China Publishing Group Corporation, China Translation & Publishing House, 2019), p. 229.

³⁰ A/HRC/35/26/Add.2, para. 17.

³¹ Ibid., paras. 38 and 44; CERD/C/CHN/CO/14-17, para. 19 (b).

³² UNDP, *China National Human Development Report Special Edition*, p. 232.

³³ A/HRC/35/26/Add.2, paras. 18 and 20.

³⁴ UNDP, *China National Human Development Report Special Edition*, p. 235.

E. Social protection and the right to social security

36. China has succeeded, in an exceptionally short period of time, in substantially strengthening its social security and protection floor, which includes benefits for older persons.³⁵

37. The core of the social assistance system is the Minimum Livelihood Guarantee for Urban and Rural Residents – i.e. the Urban and Rural *Dibao* – which provides cash or in-kind support to poor households.³⁶ Medical and Housing Assistance are specific assistance programmes that supplement the system.³⁷

38. The implementation of social assistance programmes in China is a complicated process, with millions of beneficiaries.³⁸ The *Dibao* scheme is based on household means-testing, which is not always efficient in ensuring that every eligible person receives the benefit.³⁹ Another eligibility criterion for a *Dibao* benefit is residency (i.e. *Hukou*).⁴⁰ The *Hukou* system, introduced in 1958, divided the population into rural and urban, strictly limiting population migration between these areas in the command economy. It is a system required by law, which ties access to benefits such as public health care, social security and housing to the place of household registration.⁴¹ By forcing older urban migrants to return to their place of rural household registration to access these benefits, the system produces de facto discrimination.⁴² The Government pledged that by 2020, it would eliminate the distinction between agricultural and non-agricultural residence registration, but recent efforts to reform the *Hukou* system have not made substantial positive changes for many older migrants.⁴³

39. China has also made significant progress in expanding its pension coverage from less than 200 million to about 850 million persons between 2005 and 2015,⁴⁴ notably due to the basic protection for urban and rural older persons provided by the Basic Pension Scheme for Urban and Rural Residents. In 2014, China put in place the unified Basic Pension Scheme for Urban and Rural Residents by merging the Pilot New Rural Social Pension Scheme⁴⁵ and the Pilot Social Pension Scheme for Urban Residents. This scheme basically covers the older population who are not covered by the urban employee's pension scheme. China has now achieved almost universal coverage of at least minimum pension protection for its older population, even though the payouts amount to less than 40 per cent of the national poverty line.⁴⁶ According to the Government, 30 million older persons also have access to the old-age State subsidy.

³⁵ A/HRC/WG.6/31/CHN/1, para. 66; see also European Union-China Social Protection Reform Project, "Some striking features of the Chinese pension system" (September 2017), p. 4; cf. International Labour Office, *Social Protection for Older Persons: Key Policy Trends and Statistics*, Social Protection Policy Papers, No. 11 (Geneva, 2014).

³⁶ A/HRC/35/26/Add.2, para. 13.

³⁷ European Union-China Social Protection Reform Project, "Governance framework for social assistance administration and management processes", p. 7.

³⁸ Ibid.; see also European Union-China Social Protection Reform Project, "Some striking features of the Chinese pension system"; and www.stats.gov.cn/tjsj/ndsj/2019/indexeh.htm.

³⁹ European Union-China Social Protection Reform Project, "Universal pension systems: Chinese situation and prospects" (November 2018), p. 7.

⁴⁰ European Union-China Social Protection Reform Project, "Governance framework for social assistance administration and management processes", p. 41.

⁴¹ A/HRC/26/39/Add.2, para. 71.

⁴² Ibid.; European Union-China Social Protection Reform Project, "Chinese situation and prospects", p. 23.

⁴³ CERD/C/CHN/CO/14-17, para. 34.

⁴⁴ ILO, *Social Protection for Older Persons: Policy Trends and Statistics 2017–19*. Social Protection Policy Papers, No. 17 (Geneva, 2018), p. 13.

⁴⁵ ILO, "What drives old age work in China?", Research Department Working Papers, No. 40 (Geneva, December 2018), p. 5.

⁴⁶ ILO, *Social Protection for Older Persons: Policy Trends and Statistics 2017–19*. Social Protection Policy Papers, No. 17 (Geneva, 2018), p. 24.

40. The current social pension scheme provides for a basic income support from the age of 60, while it also calls for contributions allowing for augmentation of the basic payouts.⁴⁷ However, many lower income individuals who are close to the age of 60 cannot meet the criterion of 15 years of contributions to augment future payouts or afford a lump sum contribution.⁴⁸

41. China maintains relatively young statutory retirement ages,⁴⁹ which imperil the sustainability of the system as the proportion of the workforce continues to decline.⁵⁰ In addition, adequacy of pension benefits and portability of pension rights is an issue of concern.

F. Care

42. China has achieved palpable progress in improving access to health and care services. Through a series of health sector reforms starting in 2003, the Government established a medical insurance system covering all rural and urban residents and invested significantly in the health infrastructure.⁵¹ Remaining challenges include access to affordable health-care services, quality care and adequate coverage for health-related expenditure, especially in primary care service at the local level, in particular in rural areas.⁵² The health sector has a rather segmented institutional design, with disjointed responsibilities that are dispersed over various State organs and ministries, which predictably leads to insufficient coordination and interdepartmental competition for resources.⁵³

43. It is projected that, from 2015 to 2050, total spending on older persons with respect to care, medical care, nursing, welfare and facilities will rise by around 19 percentage points, from about 7 per cent to 26 per cent of the gross domestic product, imposing a heavy burden on families and the government. The challenge for China as its society ages is how to address problems of care and geriatric-medical care associated with the ageing phenomenon, especially the financial challenges related to pension system funding and the unbalanced supply-and-demand structure of care resources for older persons.⁵⁴

44. The thirteenth Five-Year Plan (2016–2020) puts clear emphasis on private provision and private payment funded by the individual going forward, whereas the government will continue to allocate funding to cover services for selected low-income and vulnerable groups.⁵⁵ In line with this, local governments have a vested interest in encouraging the establishment of older persons' care institutions in both rural and urban areas by simplifying procedures such as registration, licensing and standardization.⁵⁶

45. China's old-age care system is based on family home care, supported according to the principle of subsidiarity by the community and supplemented by institutions, combined with geriatric medical care.⁵⁷ Changing family and household structures and rural-urban migration, with a large proportion of older persons now living separately from their

⁴⁷ Ibid., p. 5.

⁴⁸ See European Union-China Social Protection Reform Project, "Chinese situation and prospects". Of note, older persons who reach the statutory retirement ages but fail to contribute to the scheme for 15 years are allowed to continue their contribution until meeting the requirement of 15 years or to transfer to the Basic Pension Scheme for Urban and Rural Residents at the locality of their *Hukou* and claim benefit therewith.

⁴⁹ ILO, "What drives old age work in China?", p. 1.

⁵⁰ UNDP, *China National Human Development Report Special Edition*, p. 215.

⁵¹ A/HRC/35/26/Add.2, para. 56.

⁵² WHO, *China Country Assessment Report on Ageing and Health*, p. 23.

⁵³ A/HRC/35/26/Add.2, para. 59.

⁵⁴ UNDP, *China National Human Development Report Special Edition*, pp. 211–212.

⁵⁵ Glinskaya and Feng, eds., *Options for Aged Care in China*, pp. 13–14.

⁵⁶ Ibid., p. 15.

⁵⁷ Government submission on the protection of rights and interests of older persons in China, p. 17.

children, make the family provision of long-term care in rural areas difficult.⁵⁸ According to information received, the phenomenon of so-called empty-nest families⁵⁹ accounts for some 50 per cent of the older population and is predicted to reach up to 90 per cent of the older population by 2030.⁶⁰ As a result, the availability of support within the family is greatly reduced and demand for long-term care assistance at all levels is increasing and will continue to do so.⁶¹

46. Care for older persons in an increasingly ageing population constitutes a serious barrier to women's equal access to economic opportunities, as women are the primary caregivers for older persons.⁶² Caregivers, moreover, tend to face income inadequacy and insecurity.

47. Home care accounts for more than 90 per cent of caregiving, while 7 per cent of older persons are accommodated in community-based care centres and less than 1 per cent in care homes.⁶³ By the end of 2019, there were 29,000 registered care homes for older persons with a total of 7.614 million beds. The number of specialized, rehabilitation and geriatric hospitals has increased steadily in recent years. However, three quarters of these specialized units are located in economically well-developed regions of China.⁶⁴

48. About 40 per cent of the social welfare and caregiving support institutions (e.g., care homes) are private and located in rural communities in order to keep operational costs low. Despite having increased in recent years, the number of nursing homes for older persons or community day-care centres do not meet the need,⁶⁵ providing care for only a very small fraction of older persons. It is furthermore to a large extent market driven. As a result, most care homes will only accept those older persons who can live independently and not those who have more complex needs due to cognitive conditions, such as dementia, or other neurological and mental health conditions, such as depression, or those who need palliative care.⁶⁶ With an ageing population, demand for palliative care increases. It is essential to improve patient awareness of palliative care and improve accessibility of services and ensure adequate training for health-care professionals.

49. Around 300,000 formal care workers are engaged in old-age care, but less than one third of them have formal qualifications. The shortage of trained gerontological and geriatric professional caregivers, as well as of other specialized staff, such as nurses, dieticians, rehabilitation therapists, and psychologists, is a critical concern.⁶⁷

50. China has the largest number of Alzheimer's disease patients in the world. Figures are projected to increase to some 14 million in 2020 and to more than 23 million in 2030. China is currently struggling with low levels of awareness of the disease, low rates of visits to health-care providers and even lower rates of treatment.⁶⁸

⁵⁸ Economic and Social Commission for Asia and the Pacific (ESCAP), "Long-term care for older persons in Asia and the Pacific", Project Working Papers Series: Long-term Care for Older Persons in Asia and the Pacific (Bangkok, 2015), p. 5.

⁵⁹ There are three types of empty-nest families: older persons who do not have children or spouses/partners, also referred to as lonely older persons; those whose children do not live in the same house; and those whose children live in faraway cities.

⁶⁰ Of note in the context of family care, according to collated information, older persons can sue their children for infrequent visits. The children will be put on a credit blacklist as a result, which will impact, for instance, their ability to open bank accounts or get loans.

⁶¹ ESCAP, "Long-term care for older persons in Asia and the Pacific", p. 5.

⁶² A/HRC/26/39/Add.2, para. 50.

⁶³ UNDP, *China National Human Development Report Special Edition*, p. 210.

⁶⁴ WHO, *China Country Assessment Report on Ageing and Health*, p. 23.

⁶⁵ ESCAP, "Long-term care for older persons in Asia and the Pacific", p. 5.

⁶⁶ WHO, *China Country Assessment Report on Ageing and Health*, p. 23.

⁶⁷ Glinskaya and Feng, eds., *Options for Aged Care in China*, p. 51.

⁶⁸ Government submission on the protection of rights and interests of older persons in China, p. 17.

G. Automation, assistive and robotics technology

51. China considers digital technology and innovation for older persons as an effective key element of response to the challenges of its ageing population.⁶⁹ In recent years, it issued several policies to leverage technology to better support older persons.⁷⁰ In August 2015, the State Council issued a plan to promote big data technologies, especially for the purposes of storing and analysing data, calling for the accessing and sharing of government data to improve governance. In 2017, it adopted an Action Plan for Smart Ageing Industry Development (2017–2020). It also promotes technological advancement in areas such as rehabilitation robots and the industrialization of advanced technology in the field of older persons and disability services.⁷¹

52. Digital technology for ageing is also recognized as promoting industrial upgrading and boosting new drivers of economic development.⁷² China pursues a public-private partnership model, encouraging market entities to engage in the provision of care services for older persons, improve the quality and capacity of such services and satisfy demand for diversified and multilayered care for older persons.⁷³ Local governments, for instance, are also providing subsidies for artificial intelligence firms, such as in Shenzhen.

53. The Independent Expert visited Shenzhen in the southern province of Guangdong, which is known as an emerging global technological innovation hub, owing to the presence of the headquarters of many leading technology companies. It was designated in 2014 as one of the pilot zones for older persons' services reform in China. The combined presence of technology companies and research in the city was a factor in the development of technology-based services for older persons.⁷⁴ The Independent Expert very much appreciates the opportunity provided to gain insights into activities and initiatives in the areas of robotics, machine learning, artificial intelligence and other forms of automation.

54. Many of the private partners in the area of the older person care industry are investors or property developers rather than professional providers of older person care services.⁷⁵ Involving market forces in the provision of public services gives rise to new challenges as the government turns from a provider into a supervisor and regulator.⁷⁶ Rather than using administrative measures in dealing with the market, there is a need to leverage market mechanisms and tools and to ensure a human rights-based approach, a role to which local governments may be less accustomed.⁷⁷

55. In its guidelines on promoting the development of older person care services, and calling for action on promoting the "Internet Plus" model for older person care, China emphasizes the necessity to promote the application of a new generation of information technology such as artificial intelligence, machine learning, the Internet of Things, cloud computing, big data and intelligent hardware in the field of older person care services.⁷⁸

56. The guiding principle is connectivity for the purpose of optimization of support and care services. It is about linking personal and physiological or health data with data on behavioural patterns – from information on food specifications to sleep patterns – and with environmental data, such as air humidity and temperature. This should enable an all-round analysis and continuous monitoring, leading to tailored services, including more precise

⁶⁹ Ibid., p. 27; see also *Evolution of Science, Technology and Innovation Policies for Sustainable Development: The Experiences of China, Japan, the Republic of Korea and Singapore* (United Nations publication, Sales No. E.19.II.F.4), regarding the State party's frontier technology-related policies and policy objectives, p. 93.

⁷⁰ UNDP, *China National Human Development Report Special Edition*, p. 211.

⁷¹ Government submission on the protection of rights and interests of older persons in China, p. 22.

⁷² "Report on the 2019 International meeting on technology for ageing in East and North-East Asia", 13–14 November 2019, Beijing, China, para. 9.

⁷³ UNDP, *China National Human Development Report Special Edition*, p. 211.

⁷⁴ Cf. for instance the Harbin Institute of Technology, Shenzhen Academy.

⁷⁵ UNDP, *China National Human Development Report Special Edition*, p. 211.

⁷⁶ Ibid., pp. 241–242.

⁷⁷ Ibid.

⁷⁸ Government submission on the protection of rights and interests of older persons in China, p. 22.

predictability of health conditions and care needs. Such smart ageing technologies can enable older persons to live more autonomously and support ageing in place, thus making it possible to overcome classic institutionalization and cater for the needs of a projected 487 million older persons in China by 2050.

57. China has developed a vast range of smart devices and applications for older persons, such as the smart wristwatch, with a view to collecting and sending back health information on individuals, since real-time monitoring of the health situations of high-risk older persons can enable timely rescue as well as treatment that is informed, individualized and, hence, adequate and efficient. In Hangzhou and Guangzhou, an emergency call system has been installed in the homes of older persons, so that help can be provided quickly if needed.⁷⁹ Smart adult diapers with embedded moisture sensors can alert a caregiver when a diaper is wet. They may help record and identify certain health problems, such as signs of constipation or incontinence and also permit urinary and stool analysis for more comprehensive health screening. There are also digital mattresses and smart pillows that keep track of the heartbeat, breathing patterns and pulse of an older person during sleep, with an alarm system that sends data to a nurse in the case of an emergency. Smart sleep systems combine sensors and sleep aide devices connected to big data platforms to create an ideal environment for sleep by actively adjusting the lighting, air conditioners and humidifiers. The connection of multiple devices allows for the collection and analysis of data, including heart rate, breathing and movement, providing for a comprehensive sleep examination and monitoring.

58. There are initiatives to build several smart nursing homes across the country, promoting remote intelligent security monitoring technology, and achieving 24-hour automatic duty to reduce the risk of accidents among older persons.⁸⁰ So-called virtual older person care homes, or older person care homes without walls, provide a wide range of personal care and homemaker services in older persons' homes. Services are initiated by phone calls to a local government-sponsored information and service centre, which then directs a qualified service provider to the older person's home.⁸¹

59. A number of companies have also specialized in service robots for older persons, thereby supplying a number of combined functions, including the provision of social robots, as well as services related to health management, communications and emergency help. There are several such projects in some of the larger cities. In this regard, the Independent Expert notes the opportunities that technological progress offers while stressing at the same time that human contact is a fundamental aspect of human care.

60. The country has also made provisions to develop a comprehensive national aged-care information system. A core element of the system is a database of aged-care recipients and those in need of care. The ambitious objective of the information system is to provide all levels of government with tools and data in order to allow for the planning and regulation of the care industry as well as to make information accessible to the wider public.⁸²

61. The concept of the "glass human being"⁸³ is here realized with respect to older persons as a result of the comprehensive collection of data about their physiology, routines and behaviours. Such collection also allows for the detection of early signs of health problems and enables early intervention, which is critical in some cases, including those involving skin cancer or Alzheimer's disease. It is important that older persons have given prior consent to data being collected for the purpose of making such a diagnosis. The data that are generated also make it possible to categorize older persons into different groups, including those who are autonomous, semi-autonomous and dependent, and to make individualized predictions of their needs. As a result, smart technology can help older persons navigate through their routines, can prescribe medication, and can recommend

⁷⁹ Glinskaya and Feng, eds., *Options for Aged Care in China*, p. 296.

⁸⁰ Government submission on the protection of rights and interests of older persons in China, p. 22.

⁸¹ Glinskaya and Feng, eds., *Options for Aged Care in China*, p. 28.

⁸² *Ibid.*, p. 52.

⁸³ A/HRC/36/48, para. 50.

changes in diet and sleep patterns to support healthy ageing. At the same time, respect for individual autonomy also means that older persons need to be allowed to deviate from what is expected of them.

62. Smart control through recognition technologies, either facial or voice, is a central feature of smart environments and smart ageing devices. Facial recognition or voice control can help older persons, who grew up in a pre-digital age, to harness technology and operate such devices easily. Older persons may also use facial recognition and voice control for payment applications or other software associated with their property and other rights, while being unaware of the associated risks of their data being abused.

63. Technology that collects facial information increasingly permeates the lives of older persons. Smart mirrors equipped with closed circuit television (CCTV), for instance, gather data on physiological indicators such as pupil size and skin colour using facial detection algorithms in order to monitor an older person's emotional and physiological state and are used to detect health issues, such as depression or dementia. The fact that facial information is collected, and the way in which it is obtained and used, can impact the rights of older persons. It is not only essential to ensure a person's meaningful free and informed consent, but also to provide options to opt out. Smart technologies also need to be assessed in terms of their non-discrimination of older persons, including to detect biased algorithms. Other challenges such as data protection and individual data sovereignty are also to be addressed.

64. According to the authorities, facial recognition has also proven quite effective in public service delivery. For example, some older persons are able to receive their pensions using facial recognition for personal authentication, without having to present themselves in person at the social security office. Similar simplifications are in place for the use of public transportation and many other services. Facial recognition may also be used to trace older persons who went missing or for use in anti-wandering systems for older persons, including in institutional settings. It needs to be taken into account that facial recognition algorithms can only provide probabilities and that consequently, there is a certain margin of error with potentially severe consequences for the rights of the person concerned.

V. Conclusions and recommendations

A. Overall strategy and findings

65. **The Independent Expert notes that the impact of an age-related structural change of the magnitude that China is experiencing has a significant impact on all segments of society, including challenges for the enjoyment of all human rights by older persons.**

66. **In this regard, it is commendable that the government has various policies targeting older persons specifically. In the context of the consultations of the fourteenth five-year plan, the Independent Expert wishes to stress that a dedicated coherent and comprehensive policy on older persons is crucial to ensuring improved protection of their rights. She calls on the Government to consider elaborating a systematic policy that draws on good practices and experiences on implementing policies and laws for older persons. She also notes the added-value in elaborating a coherent policy that addresses systematically the specific challenges older persons face in different contexts, including in rural, urban and peri-urban settings, and takes a differentiated approach to ensuring equal enjoyment of rights. This would also contribute towards safeguarding that those persons who are most ostracized can enjoy all of their human rights.**

67. **The Independent Expert notes that the complex legal framework at the central and local levels demonstrates the importance that the government accords to the cause of older persons, notably the Law on the Protection of the Rights and Interests of Older Persons, which regulates various aspects of old age, such as care support, social protection and social services. There are many other laws, regulations and regulatory instruments in China that are of relevance for older persons. The Independent Expert**

encourages the Government to ensure that its commendable commitment to the promotion and protection of the rights and dignity of all older persons translates into effective implementation.

68. The Independent Expert further notes that one of the main challenges is to maintain and improve the well-being of older persons in all regions, while reducing inequalities and ensuring a fair distribution of resources within and between generations. This will be vital for fostering empathic intergenerational relations for the benefit of societal cohesion.

69. Moreover, the Independent Expert welcomes the dedicated institutional structures and mechanisms, such as the Chinese National Committee on Ageing and the National Bureau of Ageing. These coordination and governance structures are prerequisites to ensuring that an older person-centred approach guides all activities. She also stresses the importance of an independent, interdepartmental coordination mechanism to facilitate the implementation of a coherent policy plan, ensuring a multidisciplinary approach to ageing.

70. The Independent Expert encourages China to ratify all human rights treaties to which it is not yet party, notably the International Covenant on Civil and Political Rights. She further recommends that the Government establish an independent national human rights institution with a broad mandate to promote and protect human rights, including those of older persons, in line with the Paris Principles, and to afford it with adequate financial and human resources.

71. The Independent Expert appreciates her visit and the dialogue with the Government, noting that it constituted an opportunity to emphasize that any normative or policy action with regard to older persons must be underpinned by an approach based on all human rights. Such an approach places individuals and their rights at the centre. The existing international human rights framework, including the United Nations Principles for Older Persons and the main human rights instruments, should guide the Government's efforts in this regard.

72. On the basis of these overall conclusions and the observations contained in the present report, the Independent Expert makes the following recommendations with regard to specific areas and actors.

B. Recommendations to the Government

1. Study, data and statistics

73. The Independent Expert stresses that the availability of data and analysis is a requirement for efficient policy design. As mechanisms are already in place with regard to data collection, she notes that China, with its diverse regional circumstances, would have much to gain in adopting a framework that provides a functional set of metrics that could be applied to policy and practice relating to ageing.⁸⁴ This would make it possible to monitor and evaluate the impact of initiatives, to detect potential gaps and to improve the response. Such a framework could also serve to identify trends and challenges in order to enable a better understanding of the implications of an ageing population as an essential foundation for policy development.

74. The Independent Expert encourages the Government to ensure the nationwide, systematic and regular collection of data disaggregated by age and gender in order to reflect the extreme heterogeneity of that particular group of persons.⁸⁵ A baseline study on the human rights of older persons in China should include data on impediments to the actual exercise of rights by older persons, such as all forms of

⁸⁴ See OHCHR, "A human rights-based approach to data: leaving no one behind in the 2030 Agenda for Sustainable Development", guidance note to data collection and disaggregation, 2018.

⁸⁵ Ibid.

discrimination based on age, individually and cumulatively, exclusion, poverty and all forms of violence, abuse, neglect and maltreatment.

2. Discrimination

75. The Independent Expert stresses the need to take appropriate measures to translate the protection guarantees under the National Human Rights Action Plan (2016–2020) into practice and to eliminate multiple and intersecting forms of discrimination experienced by older persons, including older women, older persons belonging to ethnic and religious minorities, older persons with disabilities and those living in rural areas.

76. Noting the existing non-discrimination means available, the Independent Expert advocates for the translation and mainstreaming of the term “ageism” along with its notional conception. She also notes insufficient awareness and appreciation of ageism and stresses the need to adopt specifically targeted policies and a dedicated normative anti-ageism response.

77. She also encourages the Government to consider establishing an independent national equality body to monitor and report on discrimination issues, including discrimination against older persons, or ageism; to promote equality; and to deal with complaints of discrimination in an expeditious manner, ensuring access to justice in the fight against discrimination and inequality.

3. Violence, maltreatment, neglect and abuse

78. The Independent Expert recognizes the measures taken by the Government to combat violence, maltreatment, neglect and abuse of older persons, but emphasizes that additional measures and mechanisms are needed to detect, report and prevent all forms of abuse in institutional and family settings. Protocols and procedures are generally needed to assist individuals, families, caregivers and community groups to recognize those at risk and respond when appropriate. Caregivers in domestic and institutional settings need to be sensitized and trained on how to prevent and detect violence, and abuse and neglect of older persons.

79. She also encourages the Government to do more to sensitize and raise awareness among the general public. In addition, she recommends specific training for judges, lawyers and prosecutors as well as law enforcement officials, which is essential to ensuring investigations of incident cases and to its human rights-based remedy. In view of a general tendency towards the underreporting of cases of violence and abuse involving older persons, she further stresses that disseminating information to older persons about their rights is essential in encouraging them to disclose any abusive experiences.

4. Education, training and lifelong learning

80. The Independent Expert notes that China recognizes the challenges faced in ensuring education, training and lifelong learning of older persons, including insufficient resources; the need to address the disparities in the development between rural, urban and peri-urban areas and regions; and the need to strengthen both departmental coordination and the depth and breadth of social participation.

81. The Independent Expert noted that China has very good practices with regard to Universities of the Third Age for older persons. She underlines the need to expand lifelong learning opportunities with a special focus on enhancing the participation of older women. It would be important to unleash older women’s potential through lifelong learning and new forms of employment and engagement. Ensuring access to education and training in old age requires that the living environment of older persons be taken into account in the planning and design of educational opportunities. While targeted educational programmes are important, older persons should not be excluded from broader educational programmes, as this would be limiting and could also lead to creating spaces of social exclusion.

5. Adequate standards of living

82. The Independent Expert welcomes the State party's achievements in significantly reducing poverty. She also commends its efforts to address old-age poverty, but stresses that more needs to be done to ensure that all older persons are financially secure in old age, whether they are in rural, urban and peri-urban areas. She encourages the Government to continue its poverty reduction programmes and to ensure the inclusion of human rights in its people-centred approach to development, leaving no one behind. She also calls for further action to ensure that older persons, in particular older women and older persons with disabilities, enjoy an adequate standard of living and have access to basic services, especially in rural areas.

6. Social protection and the right to social security

83. Recognizing the remarkable progress of China in substantially strengthening its social security and protection floor in an exceptionally short period of time, the Independent Expert encourages the Government to further develop and unify the old-age support system, notably the urban and rural schemes; to delay the formal retirement age; and to effect change, making it easier for the urban population to join the employment-based scheme and provide incentives for their participation in basic pension schemes.

84. The Independent Expert notes that the introduction of an unqualified universal non-contributory pension at adequate levels would significantly contribute to the financial autonomy of older persons. It would also have an important gender dimension, as women are particularly prone to poverty in old age. She encourages the Government to further consolidate the progress achieved and to address issues of adequacy, equality, portability and sustainability in a more systemic manner.

85. The Independent Expert stresses that the *Hukou* system remains a source of inequality and prevents many older persons in practice from claiming their social benefits. She calls on the Government to end this de facto discrimination and to ensure that older internal urban migrants enjoy the same social security, health and other benefits as long-time urban residents.

7. Care

86. The Independent Expert calls upon the Government to develop an overall strategic vision of long-term care as a matter of urgency, which should provide overall direction for further development of such services in a comprehensive manner. An essential element in this context is the provision of sufficient day-care centres with nursing services to meet the needs of older persons and their families, including the large number of them who are unable to afford private care without substantial government support. Market-based solutions can provide an important complement to the social provision of care.

87. She further encourages the Government to accelerate the building of a unified medical insurance system for urban and rural residents, addressing the lack of portability of benefits, low reimbursement rates and high medical expenses.

88. The Independent Expert stresses the need to ensure quality control in all settings, including through the establishment of monitoring mechanisms, in order to ensure adequate care for older persons and to enable violations of their rights to be addressed effectively. She also notes that the cornerstone of a well-functioning care system for older persons is a regulatory framework that governs the accreditation of suppliers, service standards and quality assurances, along with certification criteria for different types of professional caregivers.

89. With the increase in so-called empty-nest families, radically changed family structures continue to erode the existing family home-care system. The Independent Expert stresses that the Government needs to supplement, on a large scale, family and home care with formal long-term care so as to provide alternatives for older persons, in particular in rural areas. She further notes that the care burden falls

disproportionately on women, and that better ways to support care work are needed so that women can extend their employment periods to improve income and pension benefits.

90. She strongly encourages the Government to further invest in geriatric medicine, since older persons have different patterns of disease presentation than younger adults and therefore respond differently to treatments and therapies. In addition, older persons frequently have complex social needs, related to their chronic medical conditions. Given the growing number of older patients, all medical professional training should pursue a biopsychosocial cultural approach, should cover the basics of gerontology and geriatrics, and address methods of interacting with older patients. It is essential to ensure that the different categories of health professionals, caregivers and community members are sensitized to the specific needs of older persons and receive adequate training in gerontology and geriatrics, and that policies and guidelines on the care of older persons are developed.

91. The Independent Expert noted the necessity to meet the increasing demand for palliative care as a matter of priority and stressed the importance of improving patient awareness, accessibility of services, and adequate training for health-care professionals.

92. The Independent Expert recognizes the challenges China faces in relation to dementia. She notes the limited awareness and low treatment rates of dementia and associated cognitive health conditions, and strongly encourages the Government to make dementia a public health priority. There is a need, *inter alia*, to integrate dementia services at the primary health-care level, in order to further build the capacity of doctors to diagnose and treat dementia. In addition, it is necessary to incorporate biopsychosocial cultural interventions for dementia and to provide training in dementia care. Activities in care homes also need to be improved and standardized in order to cater to the specific needs of persons suffering from dementia.

8. Automation, assistive and robotics technology

93. The Independent Expert expresses her appreciation to the Government for the opportunity provided during her visit to gain insights on activities and initiatives in the areas of robotics, machine learning, artificial intelligence and other forms of automation and digital technologies in relation to ageing, care and health services. She notes the opportunities that technological progress offers for meeting the demands of old-age care in China.

94. With reference to the findings and recommendations of her thematic report, which examines the impact of assistive technologies, robotics, artificial intelligence and automation on the fundamental rights of older persons (A/HRC/36/48), the Independent Expert notes that the use of assistive and robotics technology raises a number of issues, ranging from ethics to accountability, lack of technology accuracy, data protection, data sovereignty and informed consent, in particular for older persons. These implications have to be studied in detail, and normative frameworks and appropriate mechanisms for the use of such technology may need to be designed to ensure that its utilization conforms to human rights principles. She stresses the need to ensure that the collection, retention and use of data, notably biometric data, is regulated in law and in practice.

95. The use of autonomous health-care robots requires a more general discussion on what actually constitutes care in practice, whether it is service delivery or whether it embeds certain values, and on how to ensure that older persons are not objectified. The Independent Expert recommends a human rights impact assessment of social and care robots, which is conducted with the involvement of older persons, including the “older old”, and takes into account the range of old-age diversity. Technically, the sample of older persons participating in such a human rights impact assessment needs

to be representative of the heterogeneity of this segment of the population, including in terms of age cohorts and their various conditions.⁸⁶

96. The Independent Expert notes the impressive progress made in developing smart ageing technology, notably technology operated through facial recognition and voice control, which can enable older persons to live more autonomously and lessen the need for professional care support. Smart control, such as facial recognition and voice control, allows older persons to harness technology, operate systems that monitor their health and care, and access public or privately organized services. It is essential to ensure that older persons understand the risks associated with the use of facial and voice recognition, in order to ensure the actual exercise of meaningful, free and informed consent of older persons in the collection and use of this information. This needs to be accompanied by realistic ways for older persons to opt out. It requires the joint efforts of all stakeholders involved to safeguard an individual's right to determine whether to consent, and if so, to determine how personal and private information is being shared, used, processed and stored, with a view to preventing privacy and data protection rights from being undermined. It is therefore important to provide older persons, in their heterogeneity, with targeted digital education, training and inclusion measures.

97. The Independent Expert notes the key role of public authorities in developing technical solutions that promote the rights of older persons, by ensuring that human rights considerations, including data protection standards, are built into the design of technologies through technical specifications and contracts. It is further necessary to ensure that the collection and use of facial and voice data of individuals is tightly regulated and that remedy mechanisms are in place.

98. The Independent Expert encourages joint efforts to establish a collaborative mechanism on the issue of human rights of older persons and digital technology. She also considers it important to provide for an adequate framework and forum dedicated to addressing key questions on the challenges and good practices related to how digital technology can serve older persons in terms of systems, services, content, applications and other products, while safeguarding their dignity and the enjoyment of all their human rights.

C. Recommendations to businesses

99. In light of the important role conferred to the smart ageing industry, and to businesses more generally, in providing care services for older persons, the Independent Expert takes the opportunity to refer to the Guiding Principles on Business and Human Rights: Implementing the United Nations "Protect, Respect and Remedy" Framework. She also wishes to draw the attention of the Government to its obligation to ensure respect for, protection of and compliance with human rights in the sphere of business activities by public or private enterprises. The Guiding Principles provide an opportunity to close the governance gaps in business and human rights if supported by appropriate legislation and regulations, together with compliance mechanisms.

⁸⁶ See OHCHR, *Human Rights Indicators: A Guide to Measurement and Implementation* (HR/PUB/2012/5).