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International Labour Organization

Back to the Future

Challenges and opportunities for the future of work addressed in ILO sectoral meetings since 2010

Sectoral Policies Department

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Geneva

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1. Introduction

1.1. The ILO Centenary Initiative on the Future of Work

The world of work is undergoing profound change. Several factors are responsible, including the onward march of technology, changing patterns of production and employment, climate change and demographics.

These changes bring about challenges as well as opportunities. ILO constituents – governments, employers and workers – have an unprecedented opportunity to consign poverty to history, to promote decent work and inclusive economic growth universally, and to facilitate a just transition to greener, fairer, more prosperous and more just societies.

In 2019 the International Labour Organization (ILO) celebrates its 100th anniversary. Its Centenary Initiative on the Future of Work, launched in 2013, is intended to equip the Organization with the knowledge and tools to successfully advance its mandate of maintaining peace through social justice and decent work in its second century.

As part of this initiative, in September 2017 the ILO established a Global Commission on the Future of Work. The 26 members of the Commission will produce an independent report in early 2019 on how to achieve a future that provides decent and sustainable work opportunities for all.

The work of the Global Commission will be organized around four *centenary conversations*:

- Work and society
- Decent jobs for all
- The organization of work and production
- The governance of work.

ILO constituents have held national dialogues on the future of work in more than 110 countries. The outcomes are summarized in a new report submitted to the Commission, together with an inception report and several issue notes on the future of work prepared by the ILO.

This working paper complements these contributions by summarizing how issues directly related to the future of work have been discussed by ILO constituents in sectoral meetings held since 2010, as further material for reflection by the Commission as it carries out its important and ambitious programme of work. It has also been prepared to inform and inspire ILO constituents in specific sectors, who in recent years have launched their own debates and exchanges at national, regional and global levels on the future of work.

1.2. A sectoral perspective on the future of work

ILO constituents have addressed challenges and opportunities related to the future of work at the more than 50 sectoral meetings that the Sectoral Policies Department (SECTOR) has organized since 2010. In these meetings, ILO government, employer and worker representatives from 17 specific economic sectors and industries have adopted tripartite codes of practice, guidelines, resolutions, conclusions, and points of consensus that address the four strategic objectives of the Decent Work Agenda: employment, social protection, social dialogue, and fundamental principles and rights at work. Gender and non-discrimination issues have been addressed as cross-cutting policy drivers. In many cases they have also addressed the challenges and opportunities related to the rapidly changing world of work and made policy recommendations for future action.

To inform these meetings, SECTOR has published reports and papers concerning trends and developments, as well as sector-specific issues and opportunities. It has also prepared numerous working papers, studies, training materials and other products, which in many instances include guidance and tools on how to address future of work issues.

The purpose of this paper is to provide a sectoral perspective on the future of work and to inform the Commission's work. The challenges and opportunities relating to the future of work differ greatly between sectors – from agriculture to electronics, or from mining to health care. To be effective, the Commission's policy recommendations will have to be tailored to the specific characteristics, trends and capacity of constituents in each sector. In this regard, the report is also intended to inspire further debate among the ILO's constituents in specific sectors on how they can help shape a future that works for all in each and every economic sector and industry.

The following sections are organized as follows:

1. Describes the methodology used and the scope of the paper.

2. Offers a brief overview of the many meetings and publications that have addressed the future of work, followed by a description of how the rapidly changing world of work has been analysed and discussed by constituents from six selected sectors: mechanical and electrical engineering (electronics), health services, media and culture, retail commerce, tourism, and road transport.

3. Summarizes how key drivers of change – climate change, demographics, globalization, and technological advances – have been addressed in sectoral meetings and reports.

4. Addresses the critical challenges and opportunities affecting the future of work that arise from these drivers of change. It gives examples of how these challenges and opportunities have been discussed in past sectoral meetings and research, and how they relate to the four centenary conversations.

5. Sets out recommendations on how sectoral constituents and the ILO itself can further enhance their contribution to the ILO Centenary Initiative on the Future of Work in general and to the work of the Commission in particular.

1.3. Methodology

This paper is based on an extensive review of all ILO sectoral meetings and research carried out since 2010 by SECTOR. While all the meetings to some extent addressed the challenges and opportunities related to the future of work, some meetings and reports discussed the changing world of work more comprehensively than others, and these have been the main focus of this working paper.

The analysis is based on a combination of a desk review and consultations with ILO specialists. The desk review involved an in-depth examination of –

- sectoral meeting documents, including:
    - office reports submitted to the meetings;
    - the reports on the proceedings of those meetings;

- the documents produced by those meetings – e.g. codes of practice, guidelines, resolutions, conclusions, points of consensus.

- additional sectoral knowledge materials and tools, including:
  - working papers;
  - policy guidance notes; and
  - training materials.

To validate the analysis and findings, several consultations were held with ILO sectoral specialists, both currently in service and recently retired. We are grateful for their valuable contributions.

2. Key issues for the future of work in selected sectors

Since 2010, SECTOR has organized more than 50 sectoral meetings at the global, regional and national level in 17 economic and social sectors. During these meetings, ILO constituents have to various degrees addressed employment and labour issues related to the future of work. The key issues that the representatives of governments, employers and workers have discussed include:

- the changing organization of production and work, and the accompanying changes in employment relationships;
- the need for skills development;
- the impact of globalization and new technologies on working conditions and occupational safety and health;
- how trends in specific sectors provide new opportunities for job creation and for small and medium enterprises to contribute to sustainable development.

This chapter describes how these and other topics concerning the future of work were jointly analysed and discussed by the constituents in the six selected sectors mentioned above. Each section contains a brief description of the sector's main features and trends, followed by a summary of how challenges and opportunities in relation to the future of work have been addressed.

2.1. Mechanical and electrical engineering (electronics)

At a glance

- One of the largest and fastest growing industries worldwide: highly competitive, innovative and fast-changing, export-oriented
- Highly varied: many subsectors
- Products highly tradeable
- Large supply chains: highly vulnerable to changes in distant markets
- Fragmented production and extensive supply chains make it particularly vulnerable to fluctuating demand (bullwhip effect).

Key issues addressed

- Potential negative impacts that fluctuating demands and purchasing practices can have on workings hours and working conditions, and the need to ensure appropriate labour legislation and social protection to protect temporary workers from fluctuations, supported by awareness raising, social dialogue, and joint commitments to promoting long-lasting employment relationships. *Related issues:* human trafficking.
- Growing challenges of e-waste: need to improve management, reduce environmental impact develop sustainable enterprises and create green jobs. *Related issues:* purchasing practices, the changing organization of production and work, and the need to ensure sustainable consumption and production patterns (SDG 12).

Employing an estimated 18 million workers, [1] the electronics industry is one of the largest sectors in the global economy. This fast-growing sector produces the services and products that underpin the ground-breaking technological advances and innovations that continue to shape the lives of millions of women and men both in the world of work and in their everyday lives.

The electronics industry is comprised of a variety of sub-sectors (ranging from computers and peripherals, to automobile and aerospace components and sub-components) addressing consumer, business and industrial market segments. The information and communication technology (ICT) products industry alone accounts annually for some $3 trillion in trade and one-fifth of all world merchandise imports, [2] and employs some 12 million production workers. [3] The fast-growing industry further accounts for the largest share of the trade in intermediate manufactured goods by a wide margin, nearly double

[1] Ergon Associates Limited, 2010. Better Work: Electronics Feasibility Study, Executive Summary. August 2010.

[2] UNCTAD, 2015. Trade in ICT Goods and the 2015 Expansion of the WTO Information Technology Agreement.

[3] Delautre, G: The distribution of value added among firms and countries: The case of the ICT manufacturing sector. (ILO Research Department, Working Paper No. 16, Geneva, 2017).

that of the next largest industry (automotive and motorcycles), and ten times that of the apparel and footwear sector. [4]

In 2010, the United States contributed 27 per cent to global value added in the electronics sector. Over the years, developing countries have increased their contribution to global value added from 11 per cent in 2000 to 30 per cent in 2010. Over the same period, China increased its contribution from 4 to 23 per cent. [5] Measured by output, China is currently the biggest producer of electronic goods, with one-third of total world output.

Electronic goods are extremely tradable, even when compared to products of labour-intensive industries such as apparel, textiles and toys. This has contributed to the extensive use of outsourcing and subcontracting. Due to technological advances, particularly in communications and transport, and the standardization, commoditization and automation of certain production functions, leading multinational enterprises have been able to separate various stages of the production processes and to relocate manufacturing activities offshore. Foxconn has grown to become the world's largest contract manufacturer of electronic goods, employs more than one million workers, and manages a vast network of buyers and suppliers. [6]

The global electronics industry is highly competitive, innovative and fast-changing, with short product cycles. [7] For example, when the Apple iPhone was introduced in 2007, the time to market was six months. In 2012, this had shrunk to less than two weeks. This is exacerbated by increases in the number of new products introduced, and by a large number of late orders and changes to orders in midstream as a result of inaccurate market forecasting, avoidance of product overstocking, and uncertainty. This can create a "bullwhip effect" [8] up the supply chain. Mastering this pace of change is vital for success. Excess inventory or transit times, delays in the supply of expensive components or any finished or semi-finished product containing them, anywhere in the supply chain, result in value loss. [9]

[4] Sturgeon, J.T., Kawakami, M. (2010): Global Value Chains in the Electronics Industry. Was the Crisis a Window of Opportunity for Developing Countries? Policy Research Working Paper 5417. The World Bank. S.C.

[5] McKinsey Global Institute, J. Manyika et al.: Manufacturing the future: The next era of global growth and innovation, Nov. 2012.

[6] Ups and downs in the electronics industry: Fluctuating production and the use of temporary and other forms of employment, Issues paper for discussion at the Global Dialogue Forum on the Adaptability of Companies to Deal with Fluctuating Demands and the Incidence of Temporary and Other Forms of Employment in Electronics (Geneva, 9–11 December 2014), p. 2.

[7] The more technologically dynamic and highly valued components, such as semiconductors and hard disc drives, experience a 1 per cent decrease in value per week. See J. Curry and M. Kenney: "The organizational and geographic configuration of the personal computer value chain", in M. Kenney and R. Florida (Eds.): Locating global advantage: Industry dynamics in the international economy (Stanford University Press, Stanford, 2004), pp. 113–141.

[8] The bullwhip effect normally begins with customer demand that is lower or higher than anticipated, which leads retailers to under- or over-order the product, and which leads wholesalers to under- or over-order from suppliers. These orders result in larger and larger swings in stocks and production among suppliers up the supply chain through attempts to offset the unanticipated volume of orders. See the *Financial Times* lexicon: lexicon.ft.com/term?term=the-bullwhip-effect.

[9] ibid., p. 114.

Because the electronics industry is export-oriented and essential to other economic sectors, employment in the sector is highly vulnerable to decisions taken in faraway markets and downturns in other industries. Furthermore, many electronic products are considered luxuries, which means that consumers often postpone purchasing them during a recession. While information on the global or regional use of temporary employment in the electronics industry is scarce, individual country estimates indicate an increase in the use of temporary employment. In Mexico, some 60 per cent of workers in the electronics industry in 2009 were temporary agency workers. During production peaks, the share of temporary agency workers rose to 90 per cent. In a mobile phone manufacturing cluster in Sriperumbudur, Tamil Nadu, India, temporary contract workers represented between 46 and 80 per cent of the workforce in three factories surveyed.

In the light of these developments in the sector, ILO constituents have focused their discussions concerning the future of work in the electronics industry on two main areas: the critical role of purchasing practices, and the growing challenges of e-waste.

The critical role of purchasing practices – the way sourcing companies (including lead firms, but also intermediary manufacturers) manage the procurement of goods and services from suppliers and vendors – was discussed in 2014 by participants in the ILO Global Dialogue Forum on the Adaptability of Companies to Deal with Fluctuating Demands and the Incidence of Temporary and Other Forms of Employment in Electronics. [10] The Forum assessed the reasons why companies choose temporary and other forms of employment, as well as the impact of these forms of employment on the enterprise and workers. There was a consensus on the need to ensure appropriate labour legislation and social protection to protect temporary workers from fluctuations, supported by awareness raising, social dialogue, and joint commitments to promoting long-lasting employment relationships where possible. In this regard, producers of ICT products have in recent years adopted a number of good practices to respond to fluctuating demand and extremely short product cycles. Such options include better buyer–supplier coordination to avoid particularly high peaks in demand, as well as improved forecasting mechanisms to anticipate demand.

To better understand the impact of purchasing practices on working conditions, in 2017, SECTOR prepared a working paper on "the impact of procurement practices in the electronics sector on labour rights and temporary and other forms of employment". [11] This found that purchasing practices could have negative effects on workers' health and working conditions. Growing public awareness had led to some changes in legislation governing the electronics sector, especially in relation to the issues of conflict minerals and human trafficking, and lead firms had begun to engage more actively in initiatives aimed at ensuring that labour rights are enforced among their suppliers. While a number of private compliance initiatives such as social auditing and codes of practice have become well-established mechanisms in private governance to promote labour rights in supply chains, the role of responsible public procurement of electronics products is also being explored as an instrument to advance decent work in the sector.

The ILO stepped up its work on the growing challenge of e-waste with two publications: "The global impact of e-waste: Addressing the challenge" (2012) [12] and "Tackling informality in e-waste management: The potential of cooperative enterprises"

[10] http://www.ilo.org/sector/activities/sectoral-meetings/WCMS_244154/lang--en/index.htm

[11] http://www.ilo.org/sector/Resources/publications/WCMS_541524/lang--en/index.htm

[12] http://www.ilo.org/sector/Resources/publications/WCMS_196105/lang--en/index.htm

(2014), [13] which address labour challenges in e-waste recycling. In preparation for the Global Dialogue Forum on decent work in the management of e-waste in 2019, and guided by the ILO Green Initiative, SECTOR is commissioning additional research and developing an intervention model for how e-waste can be better managed, with less environmental impact and greater potential for sustainable enterprise development and the creation of green jobs.

Discussions of purchasing practices and e-waste have focused on two of the most critical challenges facing the electronics industry. These relate directly to some of the most important agendas of our time, including but not limited to the changing organization of production and work, and to the need to ensure sustainable consumption and production patterns (SDG 12).

2.2. Health services

At a glance

- Effective and resilient health systems are essential to equality in access to health services, good quality health care, and healthy and productive societies.
- Offers growing opportunities for employment (represents 10 per cent of overall employment in high-income countries, compared to less than one 1 per cent in low-income countries).
- Workers face increasing demands for flexibility and productivity without compromising on the delivery of quality care: need to reconcile health workers' well-being, including extensive shift, night, and weekend work.
- High occupational health risks, associated with biological, chemical, physical, ergonomic and psycho-social hazards that are not always recognized.
- Need to create some 40 million new jobs in the sector to avert the projected shortfall of 18 million health workers by 2030 in low- and lower middle-income countries, driven by demographic trends.

Key issues addressed

- Need for better forecasting of skills needs, skills development and training, investments in education and life-long learning, enforcement of occupational safety and health standards, and better working conditions, including remuneration, to make careers in health services more attractive and produce more motivated and qualified health workers, and thus improve productivity.
- Technology can supplement and contribute to the delivery of health care to rural and remote areas and open up new employment paths, for instance in telemedicine and mobile clinics.

Health and decent work are essential for social cohesion, human development and inclusive economic growth. [14] Decent work in the health sector is fundamental to ensuring effective and resilient health systems and is a prerequisite for equality in access to health services, good quality health care, and healthy and productive societies.

[13] http://www.ilo.org/sector/Resources/publications/WCMS_315228/lang--en/index.htm

[14] Improving Employment and Working Conditions in Health Services, Report for discussion at the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p. 1.

The health sector provides growing opportunities for employment, particularly for women and young people. [15] In 2013, health and social work together accounted for more than 105 million jobs worldwide, constituting approximately 3.4 per cent of total global employment, [16] rising to an estimated 107 million jobs one year later. Health employment is positively correlated with economic development: [17] it constitutes around 10 per cent of overall employment in high-income countries, compared to less than 1 per cent in low-income countries. [18] At the same time, much health-related work is carried out on an unpaid basis. This includes volunteer work, such as community health workers providing services under volunteer status in many countries, or elderly care provided by a family member who gives up paid employment in the absence of care services.

Health workers are faced with the challenge to adapt to greater demands for flexibility and productivity without compromising on the delivery of quality care. Reconciling health workers' well-being, including adequate work-life balance, with organizational requirements for continuous service remains a major challenge, particularly in the part of the health services sector that involves shift work, night work, and working on weekends on a regular basis. [19] Health care work is mostly carried out by women, and the prevailing decent work deficits in the sector often reflect overall gender inequalities and cultural prejudices in societies.

In 2010, during the ILO-WHO Joint Tripartite Consultations on HIV, tuberculosis and other occupational health issues for health workers, participants discussed how care personnel are exposed to a great variety of occupational health risks associated with biological, chemical, physical, ergonomic, and psycho-social hazards. However, they are rarely seen as workers in need of specialized occupational health protection. This is one of the reasons why virtually all countries face challenges in recruiting, deploying and retaining sufficient numbers of well-trained and motivated health workers where they are needed. [20] In many countries, fewer and fewer young women and men apply for certain health-care jobs due to low wages, long working hours, and occupational safety and health risks, particularly in preparing for and responding to public health emergencies, whether due to new epidemics, evolving diseases, natural disasters, or armed conflicts. [21] It is a major challenge to attract skilled health workers to rural and remote areas. Health worker migration has been one of the means of addressing health worker shortages in many

[15] Conclusions of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p. 1.

[16] World Employment and Social Outlook: Trends 2015, Data source, if not otherwise stated is the ILO WESO database, 2015, which includes 174 countries for which there is comparable data, available online at: http://www.ilo.org/global/research/global-reports/weso/2015/lang--en/index.htm.

[17] World Bank, 2014. Country income groups based on the World Bank classification of economies.

[18] See work referenced in footnote 14, pp. 11-13.

[19] The Sectoral Policies Department (SECTOR) published two country case studies in Brazil (2015) and South Africa (2017), which explore the complex issues around working time organization and their effects in the health services sector.

[20] Ibid.

[21] Conclusions of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p. 1-2.

countries, yet it poses further challenges, including the integration of migrant health workers and preventing the drain of skilled workers. [22]

The ILO's work to better understand the future of work in health services and to make forward-looking policy recommendations was given fresh impetus in 2016 with the establishment of the High-Level Commission on Health Employment and Economic Growth. [23] The ILO supported the Commission in its work to formulate comprehensive policy recommendations and actions that member States can take to stimulate the creation of some 40 million new jobs in the health and social sector and to avert the projected shortfall of 18 million health workers by 2030 in low- and lower middle-income countries. These recommendations were subsequently endorsed, inter alia, by the United Nations General Assembly (2016), the G20 Health Ministers (2017), the World Health Assembly (2017) and by the ILO Tripartite Meeting on Improving Employment and Working Conditions in Health Services. [24]

That tripartite meeting, held in April 2017, concluded that decent work for health workers needed to be considered in the context of the future of work, in particular the demographic trends that are driving the high demand for health workers, rapid developments in population health needs, science and technology, evolving migration and gender dynamics, and changing employment relationships in the sector. They agreed that better forecasting of skills needs, skills development and training, investments in education and life-long learning, enforcement of occupational safety and health standards, and better working conditions, including remuneration, can make careers in health services more attractive and produce more motivated and qualified health workers, and thus improve productivity. Technology can supplement and contribute to the delivery of health care to rural and remote areas and open up new employment paths, for instance in telemedicine and mobile clinics. [25]

[22] Ibid., p. 2.

[23] High-Level Commission on Health Employment and Economic Growth, co-chaired by H.E. Mr François Hollande, former President of France, and H.E. Mr Jacob Zuma, President of South Africa, and co-vice-chaired by the Director-General of the World Health Organization (WHO), the Secretary-General of the Organisation for Economic Co-operation and Development (OECD), and the Director-General of the ILO.

[24] http://www.ilo.org/sector/activities/sectoral-meetings/WCMS_508523/lang--en/index.htm

[25] See work referenced in footnote 21, p. 2.

2.3. Media and culture

At a glance

- Covers many subsectors, ranging from mass media to print and video games, employing more than 1 per cent of the workforce. In the EU more than 2.3 million people are employed in publishing activities, video and television programme production activities and programming, and broadcasting and information service activities. Approximately 1.2 million work in printing and media reproduction.
- In the past two decades the sector has undergone significant change, marked by rapid growth in new employment opportunities, dizzying shifts in the structure of the labour market, the impact of ICTs, the Internet and digital technology on employment relationships, business and work. In many countries, liberalization and restructuring have had a major impact on employment relationships and have disrupted the media and culture labour market.
- These changes have caused an increase in precarious employment in the sector. Independent workers are in some cases blocked from joining trade unions through competition law, thus limiting the scope for collective bargaining and social dialogue. There is an uneven distribution of labour rights across the media and entertainment labour market.
- The digitalization of culture and media work has created new opportunities for workers to collaborate and distribute products; at the same time these technologies have posed enormous challenges to securing intellectual property rights and attaining income streams from media work.

Key issues addressed

- Research needs to examine how the industry is trying to address issues of social dialogue, social protection and employment stability.
- Future work will also look at the employment creation potential of the culture and media sector, in particular for youth, and its role in fostering innovation and stimulating related “experience industry” sectors, including tourism, food, education and sports.

The media and culture sector plays a crucial role in meeting society’s demand for information, entertainment, communication and creativity, promoting cultural heritage, expression and diversity, and supporting democratic processes. It covers many subsectors, including: mass media, such as the internet, television, newspapers, magazines, books, film, and radio; publishing, producing and distributing audio-visual content; performing arts, such as theatre, dance, music concerts and music festivals, opera, comedy and circuses; and music recording. The broader media, culture, and graphical sector also includes video games, print and electronic publishing, and the printing and packaging industries. The main occupations in the media and culture industries include journalists, editors, writers, agents, designers and photographers; musicians, singers, actors and dancers; technicians, producers and directors of film, television and live performances; and costume, make-up, scenery, special effects and other staff. [26]

In many countries these subsectors employ more than 1 per cent of the workforce, providing entertainment and information services to the entire population. In the European

[26] Employment relationships in the media and culture industries, p.3; Issues paper for the Global Dialogue Forum on Employment Relationships in the Media and Culture Sector (14 and 15 May 2014).

Union (EU) alone, more than 2.3 million people are employed in publishing activities, video and television programme production activities and programming, and broadcasting and information service activities. Approximately 1.2 million people work in printing and media reproduction. Although a majority of these are full-time employees, non-standard forms of employment continue to increase. [27] Furthermore, the EU live performance sector employs almost one million people, up to half of whom have self-employed status. [28] Women play an important role in the media and culture industries, although they still frequently face discrimination, harassment and lower pay, and more often than men work in non-standard forms of employment. [29]

The media and culture industries have undergone significant change in the past two decades, marked by rapid growth in employment opportunities in the sector and dizzying shifts in the structure of the labour market, and by the impact of information and communications technologies (ICTs) on employment relationships, business and work. In many countries the liberalization and restructuring of these industries has been accompanied by:

- funding and job cuts in public media and entertainment companies;
- the growth of a whole range of small and large enterprises (and the disappearance of many others);
- the mushrooming of start-ups in social and other new media;
- new employment opportunities and ways of working provided through new technologies and platforms; and
- a shift towards more temporary employment arrangements characterized by weaker worker protection and representation.

Competition between media and culture enterprises, styles and formats has influenced business prospects as well as the significant changes in audience tastes, which have had an impact on the numbers of jobs created or cut. The pace of change should be just as rapid in the next few years, as further developments in digital technology are adopted. On-demand and streamed films and music will increasingly replace scheduled transmissions, cinema and DVD releases and compact disc sales. News, books and other print media will increasingly be accessed electronically, the Internet will become ever faster and accessible to a greater number of people, and the boom in social media will further promote user-generated content competing with or complementing professionally produced material. [30]

These developments and other profound changes that are shaping the future of work in the media and culture sector were elaborated in a 2012 ILO working paper. Research focused on how technological advances have disrupted the media and culture labour market, and discussions focused on ways to address the growth in non-standard forms of employment. The report outlines how technological advances have been the major driver of change in the media and entertainment sector. The proliferation of new technologies has eliminated various traditional media jobs, but in many regions the labour market has

[27] European Commission: European Sectoral Social Dialogue: Recent developments (Luxembourg, 2010), p. 19.

[28] Ibid., p. 53.

[29] See work referenced in footnote 26, p. 5.

[30] Ibid., p. 3,

improved as increasing rates of literacy and rising standards of living have expanded the consumption of media products, for instance in South Asia, East Asia and Brazil. [31]

The Internet has become the dominant feature of the sector today. No media functions without access to the web, whether for research or for the sale and distribution of traditional material. There have been significant changes in work organization – particularly in content creation. This has fuelled demand for flexible work and for people who can provide creative input across a range of media. The digitization of culture and media has also radically altered revenue streams and changed royalty and copyright arrangements, often resulting in diminished revenue for workers involved in recorded performances.

The flexibility and fragmentation of work have led to an increase in precarious employment in media and entertainment workplaces. Independent workers in this environment are in some cases blocked from joining trade unions through competition law, and thus the scope for collective bargaining and social dialogue is more limited. There is an uneven distribution of labour rights across the media and entertainment labour market. Problems of gender inequality and obstacles to equal representation of women working in media and entertainment persist, with little progress towards pay parity or better access to senior management jobs.

Changes in employment with contractual arrangements and in job content also provide major challenges for training institutions. There is an urgent need to ensure that training meets the needs of a new and evolving sector – not only providing skill sets that match the requirements of the industry, but also preparing new workers for entry into a transformed media workplace.

As requested by ILO constituents, a Global Dialogue Forum on Employment Relationships in the Media and Culture Sector was held in Geneva, in 2014. [32] The Forum discussed employment relationships in the media and culture sector (excluding the graphical subsector), and ways to encourage future action programmes and inform policy-making on the topic at the international, regional and national levels. A special focus was given to freelance and atypical work in these industries, rather than on standard employment relationships or agency work. The discussion highlighted that in the current context of greater labour flexibility and mobility, many media and culture workers face irregular and unpredictable employment opportunities and may thus be more likely to sign non-standard contracts and to have little control over their working conditions. The spectrum includes traditional open-ended employment contracts, fixed-term contracts, project and contract work, self-employment, and freelancing. In addition, there is growing use of paid or unpaid internship or work experience schemes for young people trying to enter the media and culture industries.

The meeting further agreed that some relationships in this sector are commercial and fall outside the scope of the employment relationship and its concomitant rights and responsibilities. The intellectual property rights of performers, writers, directors and others, where they exist, include economic and moral rights, which should involve prompt remuneration for the work and/or subsequent royalty or residual payments.

In many countries social dialogue is highly fragmented because subsectors of the media and culture industries are often regarded as being separate, involving both public and private employers, and a wide range of activities and professions. Therefore, promoting

[31] A. White: The digital labour challenge: Work in the age of new media, Working Paper 287, (ILO, Geneva, 2012).

[32] Global Dialogue Forum on Employment Relationships in the Media and Culture Sector, (Geneva, 2014).

collective bargaining for non-standard workers is a challenge because – unlike standard employees – they have limited attachment to single workplaces and employers. This may be hampered by the growth of non-standard forms of employment, as casual or freelance workers do not have stable workplaces and may replace or be replaced by other workers, potentially raising tensions between unionized and non-unionized workers.

In follow-up to the meeting, the ILO is carrying out research to examine how the media and culture industry is trying to address issues of social dialogue, social protection and employment stability. Future work will also look at the employment creation potential of the culture and media sector, in particular for youth, and its role in fostering innovation and stimulating related "experience industry" sectors, including tourism, food, education and sports. This will contribute not only to the centenary conversation on the organization of production and work, but also to that on decent work for all and the governance of work.

2.4. Retail commerce

At a glance

- One of the largest employers worldwide, accounting for significant proportions of GDP.
- Essential to distribute the output of other sectors.
- Globalization has greatly diversified the sector and resulted in the emergence of a number of significant multinational corporations.
- Over the last four decades the sector has experienced greater diversification in its waged employment: various forms of atypical, non-standard employment practices are widespread, such as zero hours contracts, on-demand employment, involuntary part-time and temporary employment.
- This in turn results in many young workers ceasing to view commerce as offering long-term career opportunities; turnover of workers in the sector is as a result high, increasing overheads.

Key issues addressed

- How to retain older workers in the sector, implying attention to the different needs of older workers and social protection.
- Non-standard forms of employment are insufficiently addressed by regulatory frameworks, enforcement and labour market systems, active labour market policies or judicial systems. All of these should be similarly effective and accessible for all workers and employers in the sector. Social dialogue is hence of major importance for achieving decent work in the sector.
- The need for public programmes, with full participation of the social partners and relevant labour market institutions, to strengthen the link between education, training and changing job profiles in the sector.
- Need to map good practices and share additional knowledge on the drivers of change.

Unlike many other sectors, retail commerce is important in every single country. It is a major contributor to national gross domestic product (GDP); accounting for around eight per cent of GDP in the United States and about 14 per cent in India, for example. [33] It is

[33] PricewaterhouseCoopers (PwC), 2014. The economic impact of the US retail industry (Washington DC, National Retail Federation).

one of the largest employers worldwide, often representing an entry point into the labour market, particularly for young people and women, who make up the majority of retail workers in many countries. Commerce provides work to around 13 per cent of the workforce in Germany, 16 per cent in the United States, and 22 per cent in South Africa. [34]

The commerce sector is the mechanism whereby goods and merchandise – however and wherever they may have been produced – are brought into contact with their end user, the consumer. Increasingly, the goods that retailers sell to consumers in their stores are being sourced worldwide. T-shirts on sale in US stores may have been manufactured in Bangladesh; fresh vegetables in European supermarkets may have been flown in from East Africa; and tuna for the Japanese market may have been caught by Ecuadorian fishermen. [35]

Although there is considerable diversity in the commerce sector across the world, with many very small retailers and hawkers and traders operating in the informal economy (particularly in developing countries), there has been a clear trend in recent years towards greater consolidation into larger companies. The industry is highly globalized and includes a number of significant multinational corporations. The Fortune Global 500 league table of the largest international businesses indicates that 37 of these operate in the sector. Furthermore, one of the largest companies in the world, Wal-Mart Stores, operates in the commerce sector. [36]

Highly varied non-standard forms of employment are becoming common, wages in retail commerce are below the average for the economy as a whole and the sector experiences high labour turnover. No industry has experienced greater diversification in its waged employment over the last four decades than retail commerce, where different forms of atypical, non-standard employment practices, such as zero hours contracts, on-demand employment, involuntary part-time and temporary employment are widespread. [37]

The drivers shaping labour demand and employment practices encompass include:

- shifting demographics;
- technological innovations such as self-checkouts, kiosks and point-of-sale (POS) equipment; [38]
- globalization;
- changes in economic circumstances and consumer shopping patterns;
- increasing awareness of the need for sustainable practices;
- new forms of competition;
- evolving legal frameworks; and

[34] Sectoral Studies on Decent Work in Global Supply Chains; (Geneva, 2016), p. 12.

[35] Ibid.

[36] *Financial Times*, 2015. FT 500 2015: Global 500 companies ranked by sector.

[37] Employment relationships in retail commerce and their impact on decent work and competitiveness, Issues Paper GDFERRC/2015 (Geneva, 2015), p. 1.

[38] Ibid., p. 3.

- the liberalization of shop-opening hours. [39]

Partly due to these drivers, the sector is faced with the challenge that many young workers do not view commerce as offering long-term career opportunities. The turnover of workers in the sector is high and the industry loses their skills as they leave. [40]

These drivers and challenges have informed the discussions of ILO constituents in two areas: how to attract and retain older workers in the context of an ageing population, and how to address the diversification of employment relationships in the sector. These are key to shaping a future that works for all not only in the fast-changing consumer market, but also in other social and economic sectors.

In 2011, the Global Dialogue Forum on the Needs of Older Workers in relation to Changing Work Processes and the Working Environment in Retail Commerce [41] discussed the question of how to attract and retain older workers in the sector's workforce. Constituents agreed that greater focus was needed on: age-related health promotion and ergonomics, measures to adjust working processes and the work environment to older workers, integrated life-cycle policies to promote older workers' employment, recognizing their specific skills acquired over a lifetime of work, as well as the new skills they need. It would also require adjusting social protection regimes to allow older workers, while continuing to work beyond their normal age of retirement, drawing on their pensions even as they work in retail trade.

The implications of the diversification of employment relationships in the sector was the focus of the ILO Global Dialogue Forum on Employment Relationships in Retail Commerce in April 2015. [42] The constituents stated that non-standard forms of employment were often insufficiently addressed by regulatory frameworks, enforcement and labour market systems, active labour market policies or judicial systems. All of these should be similarly effective and accessible for all workers and employers in the sector. The Forum acknowledged the value of social dialogue in achieving decent work in retail commerce. It highlighted the need for public programmes, with full participation of the social partners and relevant labour market institutions, to strengthen the link between education, training and changing job profiles in the sector.

In the points of consensus adopted at the Forum, the constituents also requested the ILO to map good practices and share additional knowledge on the drivers of change; the sector's employment-creation potential; the diversification of employment relationships; the diminishing small and medium-sized retailers; the effects of e-commerce and digitization; and the impact of non-standard forms of employment on decent work in retail

[39] Social and labour implications of the increased use of advanced retail technologies, Issues paper, Tripartite Meeting on the Social and Labour Implications of the Increased Use of Advanced Retail Technologies (Geneva, 2006), p. 4.

[40] The demographic profile of the sector was previously discussed by ILO constituents in 2008 during the Global Dialogue Forum on Vocational Education and Skills Development for Commerce Workers. See the Issues paper prepared for that meeting.

[41] Global Dialogue Forum on the Needs of Older Workers in relation to Changing Work Processes and the Working Environment in Retail Commerce, (Geneva, 2011).

[42] See Global Dialogue Forum on Employment Relationships in Retail Commerce, April 2015; and Employment relationships in retail commerce and their impact on decent work and competitiveness, Issues paper for discussion at the Global Dialogue Forum, Geneva, 22–23 April 2015, GDFERRC/2015.

commerce. [43] Such work will allow the ILO to contribute further to the centenary conversations on work and society and the organization of work and production, as well as that on decent jobs for all.

2.5. Road transport

At a glance

- Essential infrastructure enabling most other sectors, contributing up to 4 per cent of GDP and up to 5 per cent of formal employment in countries. Essential to labour mobility.
- Globalization has revolutionized largely national companies into international logistics operations to rationalize distribution. This has had an impact on non-standard forms of employment and job security, with growing concern at the excessive demands placed on drivers and the deterioration of working conditions, with increased stress levels, lower wages, and pressure on working and resting times, compromising safety: occupational safety and health concerns in their workplace can have a direct impact on other road users and on overall traffic and public safety.
- Workers are particularly vulnerable to fatigue, stress, sleep deprivation, kidney disorders, obesity, substance abuse, and HIV/AIDS.
- This in turn results in many young workers ceasing to view commerce as offering long-term career opportunities. Turnover of workers in the sector is high, increasing overheads.

Key issues addressed

- Need for improved systems in the sector to collect and disseminate data on road accidents, occupational diseases and injuries, industry composition, compensation for health and safety claims, contractual arrangements, demographics, and other relevant data.
- Comparative research needed to map good practices and share knowledge on occupational diseases and injuries and work-related disorders, gender-specific issues, border crossing and visa issues, transport network companies, remuneration systems and contractual arrangements in the road transport sector and their impact on decent work.
- The potential impact of driverless vehicles and of sharing economy initiatives such as Uber.

Roads are an integral part of any transport network and a country’s road network efficiency lies at the heart of its economic and social development. The contribution of road transport to countries’ GDP generally varies between 1 and 4 per cent. Transport investments and operations have the power to stimulate activities in other sectors, and have important direct and indirect effects on employment. Road transport employment’s share of total employment ranges from 0.36 to 5 per cent, [44] but these figures do not include the informal workforce. Road transport operations also play a fundamental role in promoting

[43] Points of consensus, Global Dialogue Forum on Employment Relationships in Retail Commerce*:* Their impact on Decent Work and Competitiveness, April 2015 (Geneva).

[44] Priority safety and health issues in the road transport sector, Issues paper prepared for the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector (Geneva, 12–16 October 2015), p. 17.

mobility, including commuting mobility which allows workers to access their place of work. [45]

Significant changes can be observed in respect of road freight transport. Globalization, liberalization and supply chain management practices have provided world market access and new opportunities for transport enterprises and logistics companies. Increased demand for road transport services has resulted in employment opportunities in many countries. At the same time, liberalization, outsourcing and high levels of competition in the road transport sector have had an impact on non-standard forms of employment and job security. There are growing concerns about excessive demands being placed on drivers and how working conditions have deteriorated, with increased stress levels, lower wages and pressure on working and resting times. [46] As patterns of social protection vary from country to country, access to health care, pensions and sickness, occupational injury, family, maternity and invalidity benefits might not be available to all road transport workers. Informal workers in the sector can be particularly vulnerable, as they are more likely to lack access to social protection mechanisms and work with low levels of income, productivity, skills, technology, and capital. [47]

These dynamics were discussed at the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector, held in October 2015. [48] Participants highlighted how transport workers are susceptible to a range of work-related disorders and diseases, including fatigue, stress, sleep deprivation, kidney disorders, obesity, substance abuse and HIV/AIDS. Irregular and split shifts involved in transport service provision make it difficult for long-haul road transport drivers to combine work and family responsibilities. Market pressures can, in certain cases, lead to contraventions of occupational safety and health rights and responsibilities. The need to make ends meet can put workers under pressure to disregard prevailing working-time arrangements or to overload their commercial vehicle, with negative consequences. Transport workers find themselves in a unique situation, as occupational safety and health concerns in their workplace can have a direct impact on other road users and on overall traffic and public safety. [49]

To tackle these safety and health issues in the sector, the constituents requested the ILO to work with member States and other international organizations to improve systems to collect and disseminate regular and disaggregated data on road accidents, occupational diseases and injuries, industry composition, compensation for health and safety claims, contractual arrangements, demographics and other relevant data. They also requested the ILO to undertake comparative research, map good practices and share knowledge on occupational diseases and injuries and work-related disorders, gender-specific issues, border crossing and visa issues, transport network companies, remuneration systems and contractual arrangements in the road transport sector and their impact on decent work. [50]

[45] Ibid., p. 3.

[46] Ibid., p. 3.

[47] Ibid, p. ix.

[48] Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector, (Geneva, 2015).

[49] See footnote 44.

[50] Conclusions of the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector (Geneva, 2015).

The Tripartite Sectoral Meeting also discussed how technological advances may profoundly change the road transport sector. Autonomous vehicle technology is still in its early stages, and vehicles are far from being fully autonomous, but if current technical and legal challenges are overcome, the impact could be significant in terms of employment and the organization of work in the sector.

Furthermore, three-dimensional (3D) printing may move the production of products and parts away from manufacturing operations in certain regions, such as Asia and Latin America, and closer to markets and end users in other regions, and thus lead to reduced demand for road transport services. 3D printing is likely to be a game changer for the transport industry and one which the ILO must follow closely in the years to come, as part of the Future of Work Initiative. [51]

Finally, the emergence of the "sharing economy" or "on-demand economy" is already changing the organization of work and employment relationships in the taxi sub-sector. The impact of these new technological advances and business models on decent work is the subject of new research by SECTOR, which will provide additional input to the Commission´s consideration of the future of work we want.

[51] Ibid., p. 32.

2.6. Tourism

At a glance

- Major growth sector in recent years, strongest in emerging economies, with significant multiplier effect for local economies, accounting for more than one-third of the total global services trade and over 10 per cent of global GDP. In many countries it employs more women and young people than most other sectors, and migrant workers make up a large share of workers in the sector.
- Plays a valuable role in bringing people from diverse backgrounds together and celebrating traditions to promote common values and respect, and supports the preservation of cultural heritage and natural environments.
- An important source of innovation and economic diversification that contributes to the development of destination countries. Government spending on infrastructure not only benefits tourism, but the economy of the country as a whole.
- Workforce characterized by diversity and fragmentation, with 20 per cent of the workforce employed within multinational enterprises and 80 per cent of the formal hotel and restaurant workforce located in small and medium-sized enterprises (SMEs). Globally there are over 250 hotel chains, with the largest companies operating portfolios of more than 6,000 hotels each and employing more than 150,000 workers in up to 100 countries. Much informality.

Key issues addressed

- Need to study new ownership patterns and their impact on employment, industrial relations, human resources development and qualification needs, as well as strategies to promote social dialogue and sustainable tourism.
- Need to promote the new ILO Guidelines on Decent Work and Socially Responsible Tourism, which set out common principles and a policy framework to guide action to achieve decent work and socially responsible tourism, and full and productive employment in the tourism sector in the future.

The tourism sector has grown significantly over the last few decades and is today one of the most dynamic and fast-developing sectors globally. Benefiting from the process of globalization and from falling relative costs of travel, international tourist arrivals have risen from 25 million in 1950 to 278 million in 1980, 674 million in 2000, and to 1,235 million in 2016. Tourism growth is strongest in emerging economies, where tourist arrivals between 2010 and 2030 are forecasted to grow twice as fast (4.4 per cent) as in advanced economies (2.2 per cent). [52]

Local sourcing of products and services by hotel chains and tour operators can improve the livelihoods of local communities and ensure that the country of destination benefits from the multiplier effects of the tourism supply chain. When pursued in an environmentally sustainable manner, tourism ensures that local natural resources are not exploited and provides for long-term economic activities in local and neighbouring communities. Tourism enterprises are an important source of innovation and economic diversification, and contribute to the development of destination countries, particularly through domestic purchases of goods, services inputs and investment flows. Government spending on infrastructure not only benefits tourism but the economy of the country as a whole. Tourism thus holds the potential to improve living conditions, promote social inclusion, and reduce poverty. Moreover, by bringing people from diverse backgrounds

[52] UNWTO, Madrid, 2017. UNWTO Tourism Highlights, 2017 Edition.

together and celebrating traditions, tourism promotes common values and supports the preservation of cultural heritage and natural environments.

Compared to other sectors of the global economy, the tourism industry is one of the fastest growing, accounting for more than one-third of the total global services trade and over 10 per cent of global GDP. [53] Tourism is a major source of employment because of its labour-intensive nature and the significant multiplier effect on employment in related sectors. It is estimated that one job in the core tourism sector creates about one-and-a-half additional or indirect jobs in the tourism-related economy, for example in transportation, food and beverage provision, handicrafts and the preservation of cultural and natural assets. In 2016 travel and tourism directly and indirectly generated 292 million jobs, and this number is expected to reach 381 million in 2027. The tourism sector overall directly or indirectly accounts for one in ten jobs worldwide. [54]

The tourism sector is not only relatively labour-intensive. In many countries it also employs more women and young people than most other sectors, and migrant workers also make up a large share of workers in this sector. [55] Globally, women represent between 60 and 70 per cent of the tourism workforce,[56] and the majority of all workers are under 35 years of age, half of whom are 25 or under. Nevertheless, older workers are an emerging work group in the sector.

The hotel and restaurant subsector is characterized by diversity and fragmentation, with 20 per cent of the workforce employed within multinational enterprises and 80 per cent of the hotel and restaurant workforce located in small and medium-sized enterprises (SMEs). [57] It is estimated that globally there are over 250 hotel chains, with the largest companies operating portfolios of more than 6,000 hotels each and employing more than 150,000 workers in up to 100 countries. In recent years, the number of owner operators has decreased, however, with many multinational hotel companies moving from a real estate-based model (owned and leased) to fee-based business models through management contracts and franchising models. Among the largest hotel chains, less than 10 per cent are owner operated. [58]

Tourism is a fast-evolving and competitive service sector. Social and demographic trends, climate change, as well as changing values in society and consumer perceptions

[53] World Travel & Tourism Council (WTTC), London, 2017: Travel and Tourism Economic Impact, 2017: World.

[54] Ibid.

[55] ILO Guidelines on Decent Work and Socially Responsible Tourism (Geneva, 2017), p. 10.

[56] ILO Toolkit on Poverty Reduction through Tourism, Sectoral Activities Department, second edition (Geneva, 2013).

[57] ILO: (1) Developments and challenges in the hospitality and tourism sector, Issues paper for discussion at the Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector and their impact on Employment, Human Resources Development and Industrial Relations, 23–24 November 2010, Sectoral Activities Programme (Geneva); (2) "Opportunities and Challenges in the Promotion of Decent Work in Hotel Global Supply Chains", in Sectoral Studies on Decent Work in Global Supply Chains: Comparative Analysis of Good Practices by Multinational Enterprises in Promoting Decent Work in Global Supply Chains, ILO, Sectoral Policies Department, Geneva, 2015; and (3) Guidelines for a just transition towards environmentally sustainable economies and societies for all (Geneva, 2015).

[58] See footnote 57(2).

and habits have fostered the development of new trends and products. Today's customers are increasingly interested in products and services respecting local cultures and protecting the environment and biodiversity. The development of non-traditional tourism and small-scale tourism, as opposed to large-scale mainstream tourism, is on the rise. This includes adventure tourism, cultural tourism, ecotourism, agro-tourism, medical and wellness tourism, technology driven and on-demand accommodation platforms, low-cost services in transport, online booking and multigenerational travel. In the absence of legislation, the impact of new technologies and social networks, the role of search engines and the emergence of private tourism services through digital platforms have increased informality. Low-skilled and unskilled workers often find themselves in the most vulnerable jobs, where they are more likely to experience poor working conditions, inequality of opportunity and treatment, violence, exploitation, stress and sexual harassment. Moreover, certain jobs in the sector are characterized by low wages, long working hours, a high turnover rate, and limited social protection. Shift and night work, seasonality, temporary, part-time employment, as well as other non-standard forms of employment, including an increasing rate of outsourcing and subcontracting are frequent in tourism. [59]

In 2010, the Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector and their Impact on Employment, Human Resources Development and Industrial Relations [60] discussed future trends and developments in the tourism sector. Particular concerns were expressed about the sector's high share of informal employment and the decent work deficits facing the sector. The discussion referred to new ownership patterns and their impact on employment, industrial relations, human resources development and qualification needs, as well as strategies to promote social dialogue and sustainable tourism.

Furthermore, the ILO held a tripartite meeting of experts from 20 to 24 February 2017, which adopted new Guidelines on Decent Work and Socially Responsible Tourism. [61] These guidelines set out common principles and a policy framework that should guide action to achieve decent work and socially responsible tourism, and full and productive employment in the tourism sector in the future. They provide practical information for those engaged in developing and implementing policies and interventions in the tourism sector with the aim of promoting sustainable tourism enterprises, investing in human resources development in the tourism workforce, implementing international labour standards and enforcing compliance with laws and regulations, strengthening labour protection, and promoting effective social dialogue and tripartism in the tourism industry.

The Guidelines recognize that governments, employers and workers have a critical role to play in shaping a more inclusive and sustainable tourism sector in the future. The Guidelines constitute the first international text specifically addressing decent work and socially responsible tourism, and should serve as a reference tool for ILO constituents and other tourism stakeholders. Adopted during the International Year of Sustainable Tourism for Development (2017), the Guidelines are also intended to contribute to achieving the 2030 Agenda for Sustainable Development, in particular SDGs 8, 12 and 14, which include tourism-specific targets.

[59] See work referenced in footnote 55, p. 11.

[60] Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector and their Impact on Employment, Human Resources Development and Industrial Relations (Geneva, 2010).

[61] See footnote 55.

3. Megatrends and drivers

An overall analysis of the 17 sectors included in this report has shown that it is, to a large extent, the same key drivers and megatrends that concern constituents the most, including but not limited to technological changes, globalization, demographics, and climate change.

3.1. Technological changes

Technological advances and their impact on specific industries have been discussed in numerous sectoral meetings and reports for those meetings.

The increased use of advanced retail technologies was a central part of the discussion at the sectoral meeting of experts in 2006, where experts focused on emerging radio frequency identification technology, self-checkouts, kiosks and point-of-sale equipment. [62] The discussion of technological advances in the retail sector continued in 2008 [63] and 2015, [64] with a focus on the explosive growth in e-commerce and its impact on decent work and productivity.

Technological advances were also discussed at the Global Dialogue Forum on Good Practices and Challenges in Promoting Decent Work in Construction and Infrastructure Projects in 2015. Participants touched upon nanotechnology and green technology. Green technologies in the construction industry are increasingly being used for the construction of new energy-efficient buildings, but can also be used in the refurbishment of existing buildings, with significant potential to reduce carbon emissions and advance sustainable development. [65]

As mentioned in section 2.5, the report prepared for the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector in 2015 included a section on two new technologies with potentially wide-ranging impact on the sector: autonomous vehicles and 3D printing. If the introduction and expansion of 3D printing technologies results in a situation where products and parts are produced much closer to end users in the future, the impact on long-haul transport could be significant. The impact of new business models

[62] Social and labour implications of the increased use of advanced retail technologies, Issues paper, Tripartite Meeting on the Social and Labour Implications of the Increased Use of Advanced Retail Technologies (Geneva, 2006).

[63] Vocational education and skills development for commerce workers, Issues paper submitted to the Global Dialogue Forum on Vocational Education and Skills Development for Commerce Workers.

[64] Employment relationships in retail commerce and their impact on decent work and competitiveness, Issues paper for discussion at the Global Dialogue Forum on Employment Relationships in Retail Commerce, April 2015.

[65] Good Practices and challenges in Promoting Decent Work in Construction and Infrastructure Projects, Issues paper for discussion at the Global Dialogue Forum on Good Practices and Challenges in Promoting Decent Work in Construction and Infrastructure Projects (Geneva, 19-20 November 2015).

and technologies in the taxi sector is already being felt by many taxi companies and workers. [66]

At the Tripartite Meeting on Improving Employment and Working Conditions in Health Services, further discussed in section 2.2, emerging technologies were discussed in a more positive light. The meeting identified technologies as a way to contribute to the more effective delivery of health care in rural and remote areas and with the potential to open up new employment paths, for instance in telemedicine and mobile clinics. [67] In contrast to the discussion of megatrends and drivers in other sectors, the prevailing view among constituents has been that care jobs – sometimes referred to as "empathy" jobs – will not easily be automated.

Technological advances have also been the major driver of change in the media and entertainment sector. They have generated new communication channels covering social networks, teleshopping, electronic books, webcasting, online telephony, music, films and games. [68] At the same time these developments present important challenges for traditional business models: the sectoral meeting of 2014 discussed their impact on the sector's occupations and work organization, paying particular attention to the emergence of teleworking and freelance contracts. [69] In this context, they referred to certain jurisdictions that have no legislation to support freedom of association as a fundamental and enabling right, but which in the future will remain of key importance to secure decent working conditions in the media and culture sector. [70]

Effective and high-speed information and communication technologies (ICT), infrastructure and software applications in the hotel, catering and tourism industry are crucial for tourism development. ICT technologies allow customer–management relations and supply chain management to be combined into a single source that facilitates a variety of operations – e.g., product selection, ordering, fulfilment, tracking, payments, and reporting – to be performed with one easy-to-use tool. ICT has also facilitated and contributed to the growing demand for flexible, individualized options, which is changing the sector from mass tourism to personalized leisure and tourism. Through new technology and social and economic ratings (e.g. social media platforms like Facebook and Twitter, travel fare aggregator websites such as Booking.com, and blogs) customers have the ability

[66] Priority safety and health issues in the road transport sector, Report for discussion at the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector (Geneva, 12–16 October 2015).

[67] Conclusions of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p. 2.

[68] The digital labour challenge: Work in the age of new media, Working Paper 287, (ILO, Geneva, 2012).

[69] Employment relationships in the media and culture industries, p.3; Issues paper for the Global Dialogue Forum on Employment Relationships in the Media and Culture Sector (Geneva, 14–15 May 2014).

[70] Points of consensus, Global Dialogue Forum on Employment Relationships in the Media and Culture Sector (Geneva, 14–15 May 2014).

to share information and research ratings on destinations, quality of service in hotels and restaurants, as well as environmental and social conditions. [71]

3.2. Globalization

Technological change is often cited as one of the driving forces behind the worldwide movement toward economic, financial, trade and communications integration – or, in other words, globalization. Technology has brought about better opportunities for organizing investment, production and trade in global production networks that cut across several countries and various sectors and industries.

This is particularly the case in the electronics sector, where advances in communications and transport, along with the standardization, commoditization and automation of certain production functions, have facilitated outsourcing and subcontracting practices. [72] Global supply chains have contributed to economic growth, job creation, poverty reduction and entrepreneurship. At the same time, failures at all levels within global supply chains have contributed to decent work deficits. In this regard, the challenge that has received the most attention in the electronics sector is the potential negative impact that fluctuating demands and purchasing practices can have on workings hours and working conditions, as discussed in section 2.1.

The textiles, clothing, leather and footwear sector is also characterized by comprehensive and complex global supply chains.[73] Along with the move from an established quota system to trade liberalization, globalization has changed the sector considerably, [74] with multiple new actors of various sizes competing for market share. [75] Brands and retailers are seeking more flexibility in design, quality, delivery, and speed to market in order to be competitive. [76] In the report and conclusions for the Global Dialogue Forum on Wages and Working Hours in the Textiles, Clothing, Leather and Footwear Industries in 2014, the impact of these changes on working hours, wages and contractual arrangements were highlighted, notably the growing use of temporary and fixed-term contracts. [77]

[71] Developments and challenges in the hospitality and tourism sector, Issues paper for discussion at the Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector and their impact on Employment, Human Resources Development and Industrial Relations, 23–24 November 2010, Sectoral Activities Programme (Geneva).

[72] See footnote 6.

[73] Wages and Working Hours in the Textiles, Clothing, Leather and Footwear Industries, Issues paper for the related Global Dialogue Forum, (Geneva 23 - 25 September 2014).

[74] Final report of the discussion, Global Dialogue Forum on Wages and Working Hours in the Textiles, Clothing, Leather and Footwear Industries (Geneva, 23–25 September 2014)..

[75] K. Fernandez-Stark, S. Frederick and G. Gereffi: “The Apparel Global Value Chain: Economic Upgrading and Workforce Development”, in G. Gereffi, K. Fernandez-Stark and P. Psilos: Skills for Upgrading: Workforce Development and Global Value Chains in Developing Countries, Duke University, North Carolina, 2011.

[76] See footnote 73.

[77] See footnote 74.

In the private services sector, telecommunications services and the contact centre industry have experienced dramatic growth and change over the past two decades due in part to globalization, telecoms liberalization, market changes and technological innovation. In 2015, constituents underlined the importance of call or contact centres, which have developed in the era of the globalization and as a result of the liberalization of national economies. [78] The report for the meeting noted that offshoring had created new employment in developing countries, but also exerted pressure on wages and conditions in developed countries. [79] However, the globalization of contact centres was not a simple shift to low-cost locations, but a more complex process in which many other criteria were considered in deciding where and whether to relocate voice services, such as a certain level of education, relevant skills, affinity, and openness in the receiving country's workforce. [80]

3.3. Demographics

Demographic trends differ between regions and countries. While many developing countries have comparatively young populations and may benefit from the demographic dividend in the years to come, industrialized countries are confronted with an ageing population. [81] In Europe, Japan and North America, the number of people aged 60 and over is increasing faster than all other age groups. In contrast, Sub-Saharan Africa is the only region in the world where youth still represent a growing share of the total population. Over the next few years, Sub-Saharan African economies will need to absorb nearly 90 million young people between the ages of 15 and 24 years. As a result youth employment has become a defining challenge for the future of the continent.

These demographic drivers will have a significant impact on all sectors, including but not limited to the tourism industry. The increase in the average age of consumers from developed countries, and the growing share of older people in international tourism, are already causing hotels and restaurants to adapt their facilities and invest in new skills. Older consumers require senior-oriented environments to meet their expectations of service and quality, communication, conviviality, comfort, and entertainment. Training and skills development of workers in the industry will hence be required to meet older tourists' needs and expectations. This opens up employment opportunities for women in particular, who have long been associated with care-giving roles, and who stand to gain from this shift in the sector. [82]

[78] Holman, D. 2013. "An explanation of cross-national variation in call centre job quality using institutional theory", in Work, Employment and Society, Vol. 27, No. 1, pp. 21–38.

[79] Taylor, P.; Bain, P. 2006. "Employment relations in Indian call centres", in Burgess, J., Connell, J. (Eds.): Developments in Call Centres (London, Routledge).

[80] Issues paper for the Global Dialogue Forum on the Employment Relationships in Telecommunications Services and in the Call Centre Industry (Geneva, 27–28 October 2015), GDFERTI/2015, p. 13.

[81] I. Goldin: ―Tourism and the G20, G20 Travel and Tourism Summit, Johannesburg, 24 Feb. 2010.

[82] Issues paper for the Global Dialogue Forum on Developments and Challenges in the Hospitality and Tourism Sector, Geneva, ILO, 2010, pp. 35-36.

Demographic trends and growing life expectancy were highlighted by constituents, which increase the demand for health workers. [83] These demographic transitions require constant adjustments to the delivery of health services, by shifting from curative towards integrated care and developing sustainable long-term care systems, with consequences for how work is carried out and on the demands made on the health workforce. [84] If the world is to avoid a projected shortfall of 18 million health workers in low- and middle-income countries by 2030, member States must massively scale up their investment in the education, training and decent employment of new health workers as well as in quality jobs and life-long learning for health workers already in employment. [85] The new ILO-OECD-WHO Working for Health programme [86] will address these and other issues related to health employment and economic growth.

Retail workers tend to be relatively young, and are typically aged 30 years and under. However, changes in the age structure of the industry are leading to an increasing share of workers aged 55 or more in many countries. This was discussed at the Global Dialogue Forum on the Needs of Older Workers in relation to Changing Work Processes and the Working Environment in Retail Commerce of 2011. The Forum was organized to develop consensus-based recommendations on how work processes and the working environment in retail commerce can be adapted to the needs of an ageing workforce, also taking into account the effects of technological change. Governments and the social partners in retail commerce agreed on the need for the industry to readjust human resource policies and practices, its work processes, and the working environment in order to attract and retain older workers, especially in the high labour-utilization sales and customer service roles. [87]

3.4. Climate change

Climate change is intrinsically linked to the future of work. As the Director-General of the ILO noted in his report to the International Labour Conference in 2017, if industrial production or work is the predominant cause of climate change, then inevitably the world of work must play a leading role in developing and implementing strategies to prevent, mitigate and adapt to it. In a number of sectoral meetings since 2010, constituents have discussed how the ILO can contribute to a just transition to environmental sustainability that will serve to advance both decent work opportunities for all and the protection of the planet.

The Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector of 2010 highlighted the need for sustainable tourism in order to address

[83] Conclusions of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p. 2.

[84] Issues paper for the Tripartite Meeting on Improving Employment and Working Conditions in Health Services, Geneva, ILO, 2017, p. 4.

[85] Note on the Proceedings of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services, Geneva, ILO, 2017.

[86] http://www.who.int/hrh/com-heeg/action-plan-annexes/en/

[87] Points of consensus emerging from the Global Dialogue Forum on the Needs of Workers in relation to Changing Work Processes and the Working Environment in Retail Commerce, Geneva, ILO, 2011.

climate change. [88] The report prepared for the Forum shows that tourism is estimated to create about 5 per cent of total carbon emissions – primarily due to tourist transport (75 per cent) and accommodation (21 per cent, mainly due to air conditioning and heating systems). Climate change can be a determining factor when people choose their holiday destinations, depending on their demands for sun, snow conditions, mountains or regions with warm weather, and it can have an effect on the length and quality of tourism seasons. [89] Some tourism resorts need to take climate change into consideration more than others. In Fiji, for instance, the rising sea level could lead to a loss of tourism infrastructure and seriously influence the industry and its employment. [90] In 2017 constituents adopted Guidelines on Decent Work and Socially Responsible Tourism to support governments, employers, workers, and other stakeholders engaged in the design and implementation of measures to promote decent work and the just transition to environmental sustainability. [91]

The report prepared for the discussion at the Tripartite Sectoral Meeting on Occupational Safety and Health and Skills in the Oil and Gas Industry Operating in Polar and Subarctic Climate Zones of the Northern Hemisphere noted that warming of the climate system is unequivocal. [92] The recent warming of the Arctic has enabled oil and gas exploration that would have been impossible just a few decades ago. As a result, the region has experienced a development boom with new drilling platforms. [93] While this has generated new employment opportunities, working conditions in Arctic areas remain extreme and require special safety and health measures to avoid occupational injuries and fatalities.

4. A sectoral contribution to the four conversations

The future of work is not easily predicted, nor easily defined, or pinned down in neat categories of a select number of opportunities on the one hand and challenges on the other. In his report to the International Labour Conference in 2015, the Director-General of the ILO addressed a number of critical and inter-related topics and proposed these be discussed in the four centenary conversations. These conversations are not intended to limit the issues to be considered by governments, workers and employers – the Future of Work Initiative will benefit from the fullest diversity of contributions that it is able to attract. Rather, the aim is to ensure that these contributions are not so dispersed or unconnected that their value risks being lost.

Without using the term “the future of work”, sectoral constituents have discussed and addressed several critical topics that have emerged as a result of the changing world of

[88] Final report of the discussion, Global Dialogue Forum on New Developments and Challenges in the Hospitality and Tourism Sector and their impact on Employment, Human Resources Development and Industrial Relations, 23–24 November 2010, Sectoral Activities Programme (Geneva, 23 - 24 November 2010), GDFHTS/2010/8, p. 2.

[89] UNWTO: From Davos to Copenhagen and beyond: Advancing tourism’s response to climate change, Background paper, UNWTO 2009, p. 4.

[90] ILO: Green jobs in the South Pacific: A preliminary study, (Geneva, 2010).

[91] Guidelines on Decent Work and Socially Responsible Tourism (Geneva, 2017).

[92] http://www.ilo.org/sector/Resources/publications/WCMS_438074/lang--en/index.htm

[93] N. Coleman: “Double nag at Norway offshore future”. In Oilgram News (2014, Vol. 92, No. 111), pp. 1 and 4.

work, including but not limited to the changing organization of production and work; the accompanying changes in employment relationships; the need for skills development; the impact of globalization and new technologies on working conditions; work-life balance; occupational safety and health; and how trends in specific sectors provide new opportunities for job creation and for small and medium enterprises to contribute to sustainable development. Like the future of work dialogues that national tripartite constituencies have held in more than 110 countries, the conclusions and outputs of the 50 sectoral meetings held at regional and global level since 2010 can greatly contribute to each of the four centenary conversations.

4.1. Work and society

Work is crucial to people's sense of identity and status in society and contributes to a sense of belonging to a broader community. The workplace is where many forms of social interaction begin, and many of the individual's social relationships are forged and maintained. This is also why the hundreds of millions of women and men without a job find their situation so difficult to bear. The effects of unemployment have been discussed with great concern at almost all sectoral meetings and in several reports published by SECTOR, particularly in the aftermath of the global financial and economic crisis.

But even for those women and men who have a job, the status associated with certain occupations in economic sectors can change over time and continues to do so. As discussed at the Tripartite Meeting on Improving Employment and Working Conditions in Health Services, the status of health workers has changed for the worse in many countries. The lack of recognition, including low pay, not reflecting the increasingly demanding aspects of health work, has driven many women and men to leave the profession, resulting in costly staff turnover and a lack of skilled workers. [94] The teaching profession has also been affected by challenges in recruiting and retaining qualified teachers. [95] In fishing, where the challenges of work at sea make it difficult to attract or retain experienced fishers, fishing vessel owners have turned to migrant, or "non-local" fishers, often with little choice but to take on this hazardous line of work and fill shortages in the sector. [96] These are only a few of the examples of the effects of changing occupational status in different sectors in the world of work.

Work-life balance is increasingly mentioned by constituents as an issue in many sectors. Long-haul road transport drivers, for instance, find it particularly challenging to combine work and family life because of the irregular and split shifts involved, in addition to occupational stressors including constant time pressures, social isolation, disrespectful treatment by others, and driving hazards such as weather changes. [97] Work-life balance also constitutes a crucial challenge in the health sector, where there is a strong organizational performance pressure to achieve health objectives, which can conflict with

[94] S. Austen et al.: "Recognition: Applications in aged care work", in Cambridge Journal of Economics (2016, Vol. 40), pp. 1037–1054, available at: http://cje.oxfordjournals.org/

[95] ILO, UNESCO, Report of the 12th Session of the Joint ILO–UNESCO Committee of Experts on the Application of the Recommendations concerning Teaching Personnel (2015), p. 30.
[96] Issues paper submitted to the Tripartite Sectoral Meeting on Issues related to Migrant Fishers, (Geneva, 2017.

[97] Issues paper, Report for discussion at the Tripartite Sectoral Meeting on Safety and Health in the Road Transport Sector (Geneva, 12–16 October 2015).

the reconciliation of workers' well-being. [98] In the electronics sector, it has been documented and discussed how competitive pressures and purchasing practices have resulted in excessive hours and in extreme cases forced overtime. On the other hand, it has been argued and acknowledged that new technologies and flexible work arrangements can, in the right conditions and circumstances, improve work–life balance, especially for workers who may not follow a traditional, continuous career path, but instead participate in the labour force in a patchwork manner during different phases of their lives. [99] Similar arguments were made with regard to the technological advances that have enabled teleworking, which is promoted by some enterprises as a means to achieve a better work–life balance, increase worker morale, and achieve productivity improvements.

While a decent job is the best route out of poverty, work also has the capacity to destroy lives: an estimated 2.3 million women and men die each year because of their work. [100] Mining, oil and gas, port work, agriculture, shipbuilding and ship breaking remain some of the most hazardous sectors. The high number of injuries, diseases and fatalities, as well ways to limit these through improved occupational safety and health management, have been a recurrent topic in at least 25 sectoral meetings since 2010. In the oil and gas industry, for example, hazards and risks are exacerbated by extremely low temperatures in the polar and subarctic climate zones of the northern hemisphere, which require special occupational and safety health measures. [101] Capture fisheries, meanwhile, have among the highest incidence of occupational injuries and fatalities, with long working hours, remote work, exposure to dangerous weather conditions, and the generally hazardous nature of working in the marine environment. [102]

The ports industry has traditionally been a sector with a high number of injuries and fatalities. However, technical developments in the industry have introduced sophisticated cargo-handling equipment with greatly increased capacity and reach, which have resulted in significant improvements for the safety of port workers. At the same time, some technological changes have introduced new hazards, which the ILO and its sectoral constituents have addressed through the revision of several codes of practice (e.g., those on port work, opencast mining, shipbuilding, and ship repair). Occupational safety and health will continue to be a priority for the ILO and its sectoral constituents in the years to come, not only to reduce injuries and fatalities from known hazards and risks in hazardous sectors, but also in terms of updating and future-proofing existing safety and health guidance in the light of new technologies and the changing organization of production and work. [103]

[98] The Work in Fishing Convention, 2007 (No. 188): Getting on board, Issues paper for the Tripartite Sectoral Meeting on Improving Employment and Working Conditions in Health Services, (Geneva, 2017).

[99] S. Scherer: "The social consequences of insecure jobs", in Social Indicators Research, Vol. 93, No. 3, Sep. 2009, pp. 527–547.

[100] Safety and Health at Work: A Vision for Sustainable Prevention, XX World Congress on Safety and Health at Work 2014 (ILO, Geneva): Global Forum for Prevention, 24–27 August 2014, Frankfurt, Germany.

[101] Points of consensus emerging from the Sub-Saharan African Tripartite Workshop on Occupational Safety and Health in the Oil and Gas Industry, (Maputo, 2017).

[102] Issues paper for the Global Dialogue Forum for the Promotion of the Work in Fishing Convention, 2007 (No. 188), (Geneva, 2013).

[103] Code of practice on safety and health in ports (Revised 2016) adopted by the Meeting of Experts to Adopt a Revised Code of Practice on Safety and Health in Ports, (Geneva, 2016).

4.2. Decent work for all

One of the most pressing challenges today is to generate sufficient jobs, in particular for women and young people. When considering the fragile economic recovery and the potential for job losses due to automation and robotics in the decades to come, the creation of decent work for all is likely to become an even greater challenge in the future. The challenge cuts across all sectors and has been discussed in 14 sectoral meetings and many reports published by the Sectoral Policies Department since 2010.

The key question that constituents have considered is whether technological changes and other megatrends and drivers will create new jobs, destroy jobs or displace workers, and what the overall impact will be for specific economic sectors and countries. The evidence emerging in different sectors from past sectoral meetings is mixed. On the one hand, there are concerns that driverless trucks or 3D printing will reduce demand for drivers in the road transport sector. On the other hand, tourism and health services are seen as sectors with great potential for job creation, particularly for young women and men, provided member States invest in these sectors and introduce more coherent, ambitious and sustainable policies to promote decent work.

It is interesting to note that the discussion about technological advances and the impact on jobs has evolved, over time, from a mood of mild optimism to trepidation and fear. Though the meeting is not subject to this review, the discussion concerning technological advances at the Tripartite Meeting on Social and Labour Implications of the Increased Use of Advanced Retail Technologies of 2006 is indicative of this shift in attitudes. The meeting focused on how technology has enabled distributors, suppliers and brokers to work closely together and facilitate the exchange of business documentation between organizations in a structured machine-processable form. In recent years, however, the focus has changed to how technology and the use of big data have accelerated online shopping (e-commerce), and how this poses a fundamental threat to traditional business models and employment in the sector. [104]

While it is true that technological advances are sometimes met with trepidation and fear, ILO sectoral constituents have noted how in many sectors new technologies continue to generate new employment opportunities. This was the case, for instance, in the Tripartite Meeting on Improving Employment and Working Conditions in Health Services, where it was noted that advances in telemedicine and mobile clinics in health services are creating new opportunities for decent work. [105] Similarly, while the report for the Global Dialogue Forum on Employment Relationships in the Media and Culture Sectors noted that the Internet had destroyed a great number of traditional jobs in the media and culture sector, it was also acknowledged that start-ups in social media were creating many new jobs. [106] In the telecommunications sector, massive investment in telecoms infrastructure and next-

[104] Sectoral Studies in Decent Work in Global Supply Chains, (Geneva, 2016).

[105] Conclusions of the Tripartite Meeting on Improving Employment and Working Conditions in Health Services (Geneva, 24–28 April 2017), p.2.

[106] Issues paper for the Global Dialogue Forum on Employment Relationships in the Media and Culture Sectors, (Geneva, 2014).

generation networks is likely to create new ways of working and more employment opportunities in the future. [107]

However, constituents have also acknowledged how these prospects can be hampered by a skills mismatch, as many of the new jobs created often require different skills or higher skill levels than those destroyed. In the chemicals industry, for instance, the global economic crisis has widened a pre-existing skills mismatch, yet training and skills are crucial in the sector to ensure sustainable industrial production and long-term employment prospects. [108] Training and skills development for all media and culture workers is of crucial importance, especially given the changes taking place in the industry: technology and the fundamentally changed media landscape require new skills. [109]

The critical role of skills in preparing workers and enterprises for the challenges and opportunities of the future has been discussed by constituents in the education sector on numerous occasions. On the one hand, it is noted how low-quality education and training or lack of access to training can have the effect of excluding workers without the requisite skills from enjoying the benefits of economic growth and of discouraging investment in new technologies. On the other hand, more and better skills can create a virtuous cycle that makes it easier to innovate, to adapt new technologies, to attract investment, to compete in new markets, and to diversify the economy, which can boost job growth, improve productivity and foster social inclusion. [110]

4.3. The organization of work and production

In an increasingly globalized economy, technological advances and competitiveness are fuelling rapid evolution in the organization of work and production. The rise of global supply chains and global production networks is often linked to significant enterprise and employment creation and growth in some sectors, but has also resulted in decent work deficits. The future of work will to a large degree depend on how governments, employers and workers address governance gaps and seize opportunities to advance decent work in global supply chains within and across key sectors of the economy.

With the help of technological advances in manufacturing, multinational enterprises have been able to divide production processes into separate phases and to relocate their activities offshore. Labour-intensive activities were transferred to lower-cost locations, providing work to millions of people, especially in developing countries, and particularly in sectors such as electronics and textile, clothing, leather and footwear. [111] Work that was previously integrated within one firm is increasingly carried out by a network of entities and individuals, with blurred lines of responsibility in fragmented supply chains.

In this regard, sectoral constituents have focused on how competitive pressures, short product lifecycles and the fragmentation of production have had an often negative impact

[107] Issues paper for the Global Dialogue Forum on Employment Relationships in Telecommunication Services and in the Call Centre Industry, (Geneva, 2015).

[108] European Commission: Employment and social developments in Europe 2012 (Brussels, 2012).

[109] See footnote 106.

[110] Report for discussion at the Global Dialogue Forum on Education and Training, (Geneva, 2010).

[111] Issues paper for the Global Dialogue Forum on Wages and Working Hours in the Textiles, Clothing, Leather and Footwear Industries, (Geneva, 2014).

on working hours and conditions of work, and how this has resulted in an increase in the use of non-standard forms of employment. This was the case in the Global Dialogue Forum on the Adaptability of Companies to Deal with Fluctuating Demands and the Incidence of Temporary and Other Forms of Employment in Electronics, but the issue has also been highlighted as of growing concern in textiles and retail commerce. In 2014, constituents adopted far-sighted conclusions and recommendations concerning measures the electronics industry can take to balance industry concerns for sustainability and the needs of workers, including social dialogue, social protection, occupational safety and health, and cross- and retraining. These and other measures will remain highly relevant in the future as the debate on how globalization can be better managed continues.

4.4. The governance of work

Globalization and technological advances have created new challenges with regard to the governance of work in all sectors. Faced with a changing climate, tripartism and social dialogue are key to ensuring a just transition to environmentally sustainable economies and societies for all. Demographic shifts mean hard choices regarding the modernization of welfare institutions and creating millions of new and decent jobs for young workers. Similarly, the transformations brought about by globalization and technological advances require strong and effective labour market institutions to ensure that these drivers of change become a force for inclusive growth and decent work, rather than a cause of greater inequality and unrest.

Almost all of the sectoral meetings since 2010 have concluded with clear recommendations concerning the need to strengthen the governance of work. This has included calls to ratify relevant conventions, to revise and update relevant legislation and regulations, to strengthen labour administration and labour inspection, and to formulate and implement policies to advance decent work in the sectors concerned. Constituents have noted how considerable progress has been made to advance decent work, but also how much governments can do to ensure that the world of work is governed in a way that addresses the most important challenges and opportunities of our time.

It is important to note how the capacity and functioning of social dialogue institutions varies greatly across sectors. While retail workers and those employed in public services are relatively well organized in many countries, trade union density is much lower in sectors such as agriculture, electronics, textiles, clothing, leather, and footwear. In sectors such as mining and chemicals, employers' and workers' associations actively represent their members and engage in sectoral meetings and social dialogue, but this is not the case in all sectors and industries. This is largely due to recurrent challenges related to decreasing union membership and a lack of human, technical and financial resources, but also due to emerging issues such as the challenges of organizing specific groups such as youth, migrant workers, women, and workers in the gig economy.

There is growing evidence that the technological advances occurring will make the organization of workers in most sectors even more challenging in the future. At the same time, however, there is also currently a considerable degree of experimentation into how new technologies can be used to provide better services for members of employers' associations and to organize workers, for instance in the media and culture sector, where specific schemes have been developed to provide coverage to freelancers.

Alongside these efforts and developments, almost all sectors have witnessed a growth in voluntary and private governance initiatives, including industry-wide codes of conduct, voluntary standards, multi-stakeholder initiatives, and various forms of cross-border social dialogue. These governance-related initiatives are frequently guided by ILO Conventions and Recommendations, the ILO's MNE Declaration, the OECD Guidelines for

Multinational Enterprises, and the United Nations Global Compact. There are notable differences in the types of practices followed in each sector. Whereas the logistics and tourism sectors mainly apply company codes of conduct to address labour standards in supply chains, multinational enterprises in the tea sector, for example, have moved to using third party certification of the tea they purchase. The chemical sector uses voluntary initiatives (e.g. Responsible Care, Together for Sustainability) and international framework agreements, which are also applied in textiles and clothing to promote fundamental principles and rights at work. By contrast, employers and workers in the maritime sector engage in collective bargaining organized by the ILO.

5. Conclusions and recommendations

The changing world of work has been discussed by ILO sectoral constituents for many years. The reports prepared for these meetings and the discussions themselves have yielded insights and policy recommendations that are directly relevant to the four centenary conversations, but these have only partly been incorporated into other ILO research and reports concerning the future of work.

As reflected in the analysis of how megatrends, drivers and key topics in relation to the future of work have been discussed in sectoral meetings and reports since 2010, ILO sectoral constituents have a key role to play in shaping a future that works for all in each and every industry and sector. At the same time, the ILO can and should do more to improve understanding of how technological advances, climate change, demographics and globalization are transforming specific sectors, with a view to helping governments, employers and workers address challenges and seize opportunities in selected sectors.

In response to these challenges, SECTOR – together with sectoral constituents – will produce a series of working papers on the future of work in specific sectors in the run-up to the ILO’s centennial year in 2019. These working papers will focus on the future of work in the health sector, the rural economy, shopping, taxis, and textiles, clothing, footwear and leather. The aim is to enrich the work of the Commission and to inform dialogues between governments, employers and workers at the global, regional, sectoral and national level on how they can shape a future that works for all.