# Commission Directive 2019/1832 of 24 October 2019 amending Annexes I, II and III to Council Directive 89/656/EEC as regards purely technical adjustments

## COMMISSION DIRECTIVE 2019/1832

## of 24 October 2019

## amending Annexes I, II and III to Council Directive 89/656/EEC as regards purely technical adjustments

#### THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Council Directive 89/656/EEC of 30 November 1989 on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace<sup>(1)</sup>, and in particular Article 9 thereof,

Whereas:

- (1) Principle 10 of the European Pillar of Social Rights<sup>(2)</sup>, proclaimed at Gothenburg on 17 November 2017, provides that every worker has the right to a healthy, safe and well-adapted working environment. The workers' right to a high level of protection of their health and safety at work and to a working environment that is adapted to their professional needs and that enables them to prolong their participation in the labour market includes the use of personal protective equipment at the workplace if risks cannot be avoided or sufficiently limited by other means, measures, methods or procedures of work organisation.
- (2) The implementation of the directives related to the health and safety of workers at work, including Directive 89/656/EEC, was the subject of an *ex-post* evaluation, referred to as a REFIT evaluation. The evaluation looked at the directives' relevance, at research and at new scientific knowledge in the various fields concerned. The REFIT evaluation, referred to in the Commission Staff Working Document<sup>(3)</sup>, concludes, among other things, that the use of personal protective equipment concerns approximately 40 % of the EU's workforce, as risks at the workplace cannot be avoided by any other means, and that there is a need to address difficulties in implementing Directive 89/656/EEC.
- (3) In its Communication 'Safer and Healthier Work for All Modernisation of the EU Occupational Safety and Health Legislation and Policy'<sup>(4)</sup>, the Commission reiterated that while the REFIT evaluation of the Union's *acquis* on occupational health and safety confirmed that the legislation in this field is generally effective and fit-for-purpose, there is scope for updating outdated rules and ensuring better and broader protection, compliance and enforcement on the ground. The Commission emphasises the particular need to consider the definition of personal protective equipment and its use by different services and sectors, as set out in Article 2 of Directive 89/656/EEC.
- (4) Directive 89/656/EEC lays down minimum requirements for the use of personal protective equipment used by workers at work, which is to be used when the risks

concerned cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods or procedures of work organisation. To facilitate the establishment of the general rules required pursuant to Article 6 of Directive 89/656/EEC, Annexes I, II and III to Directive 89/656/EEC provide non-binding guidelines intended to facilitate and support the selection of appropriate personal protective equipment for the risks, activities and sectors concerned.

- (5) Regulation (EU) 2016/425 of the European Parliament and of the Council<sup>(5)</sup> lays down the provisions regarding the design, manufacture and marketing of personal protective equipment. Regulation (EU) 2016/425 modified the risk categorisation of products, to enable employers to understand and thus to deploy personal protective equipment, as further explained in the Personal Protective Equipment Guidelines<sup>(6)</sup> that clarify procedures and matters referred to in Regulation (EU) 2016/425. It is considered appropriate to update Annexes I, II and III to Directive 89/656/EEC in order to ensure consistency with the risk classification laid down in Regulation (EU) 2016/425 and to align them with terminologies used and types of personal protective equipment referred to in Regulation (EU) 2016/425.
- (6) Article 4(1) of Directive 89/656/EEC foresees that employers must provide personal protective equipment that complies with the relevant Union provisions on design and manufacture with respect to safety and health. Pursuant to that Article, employers who provide that personal protective equipment to their workers must ensure that such personal protective equipment fulfils the requirements laid down in Regulation (EU) 2016/425.
- (7) Annex I to Directive 89/656/EEC sets out a specimen risk survey table for the use of personal protective equipment and sets out types of risks that could occur in workplaces in relation to different parts of the body to be protected by personal protective equipment. Annex I should be amended to take account of new types of risks that appear in workplaces and to ensure consistency with the risk classification and the terminology used, in particular in Regulation (EU) 2016/425.
- (8) Annex II to Directive 89/656/EEC, which sets out a non-exhaustive guide list of types of personal protective equipment, should be amended to take account of the new types of risks identified in Annex I to that directive. Annex II should also be amended to include examples of personal protective equipment currently available on the market in conformity with Regulation (EU) 2016/425 and the terminology used in that Regulation.
- (9) Annex III to Directive 89/656/EEC sets out a non-exhaustive guide list of activities and sectors of activity that could require the provision of personal protective equipment, bringing together the risk classifications set out in Annex I to that directive and the types of personal protective equipment described in Annex II to that directive. Annex III to Directive 89/656/EEC should be restructured to ensure consistency between the terminology and classifications used across the three annexes and with Regulation (EU) 2016/425. This will enable employers from different sectors and industries to better identify and provide personal protective equipment that corresponds to specific

activities and the specific types of risks that workers are exposed to, as indicated by the risk assessment.

- (10) The Advisory Committee for Safety and Health at Work was consulted on the measures resulting from the adoption of the Commission's Communication 'Safer and Healthier Work for All – Modernisation of the EU Occupational Safety and Health Legislation and Policy' that are required to keep the Union's occupational health and safety legislation effective and fit-for-purpose.
- (11) In its 'Opinion on the Modernisation of Six OSH Directives to Ensure Healthier and Safer Work for All'<sup>(7)</sup>, adopted on 6 December 2017, the Advisory Committee for Safety and Health at Work recommends that Directive 89/656/EEC should be amended to enhance its relevance and effectiveness.
- (12) In a subsequent 'Opinion on technical updates to the annexes of the Personal Protective Equipment Directive (89/656/EEC)'<sup>(8)</sup>, adopted on 31 May 2018, the Advisory Committee for Safety and Health at Work recommends that specific updates to Annex I, II and III to Directive 89/656/EEC, taking into account the latest technological developments in the field and ensuring consistency with Regulation (EU) 2016/425, should be carried out.
- (13) In preparing the current update of Annexes I, II and III to Directive 89/656/EEC, the Commission was assisted by experts representing Member States, who provided technical and scientific support.
- (14) In accordance with the Joint Political Declaration on explanatory documents<sup>(9)</sup>, adopted by the Member States and the Commission on 28 September 2011, Member States have undertaken to accompany, in justified cases, the notification of their transposition measures with one or more documents explaining the relationship between the components of a directive and the corresponding parts of national transposition instruments.
- (15) The measures provided for in this Directive are in accordance with the opinion of the Committee established by Article 17 of Council Directive 89/391/EEC<sup>(10)</sup>,

HAS ADOPTED THIS DIRECTIVE:

Article 1

Annexes I, II and III to Directive 89/656/EEC are replaced by the text in the Annex to this Directive.

#### Article 2

1 Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 20 November 2021 at the latest. They shall forthwith communicate to the Commission the text of those provisions.

When Member States adopt those measures, they shall contain a reference to this Directive or shall be accompanied by such a reference on the occasion of their official publication. Member States shall determine how such reference is to be made.

2 Member States shall communicate to the Commission the text of the main provisions of national law which they adopt in the field covered by this Directive.

#### Article 3

This Directive shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

Article 4

This Directive is addressed to the Member States.

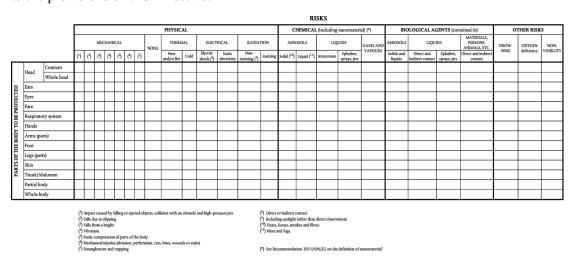
Done at Brussels, 24 October 2019.

For the Commission The President Jean-Claude JUNCKER

#### ANNEX

#### (1) Annex I to Directive 89/656/EEC is replaced by the following:

ANNEX RISKS IN RELATION TO THE BODY PARTS TO BE PROTECTED BY PPE (\*) I (\*) This list of risks/parts of the body cannot be expected to be exhaustive. The risk assessment will determine the need to provide a PPE and its characteristics according to the provisions of this Directive.



(2) Annex II to Directive 89/656/EEC is replaced by the following:

#### ANNEX II

#### NON-EXHAUSTIVE LIST OF TYPES OF PERSONAL PROTECTIVE EQUIPMENT WITH REGARD TO THE RISKS THEY PROVIDE PROTECTION AGAINST Equipment for HEAD PROTECTION

- Helmets and/or caps/balaclavas/headgears against:
  - Impacts caused by falling or ejected object
  - Collision with an obstacle
  - Mechanical risks (perforation, abrasion)
  - Static compression (lateral crushing)
  - Thermal risks (fire, heat, cold, hot solids including molten metals)
  - Electric shock and live working
  - Chemical risks
  - Non-ionizing radiation (UV, IR, solar or welding radiation)
  - Hairnets against risk of entanglement

## Equipment for HEARING PROTECTION

- Earmuffs (including e.g. earmuffs attached to a helmet, active noise reduction earmuffs, earmuffs with electrical audio input)

— Earplugs (including e.g. level-dependent earplugs, earplugs adapted to the individual) *Equipment for EYE AND FACE PROTECTION* 

– Spectacles, goggles and face shields (prescription lenses where appropriate) against:

- Mechanical risks
- Thermal risks
- Non-ionizing radiation (UV, IR, solar or welding radiation)
- Ionizing radiation
- Solid aerosols and liquids of chemical and biological agents

## Equipment for RESPIRATORY PROTECTION

- Filtering devices against:
  - Particles
  - Gases
  - Particles and gases
  - Solid and/or liquid aerosols
- Insulating devices, including with an air supply
- Self-rescue devices
- Diving equipment

## Equipment for HAND AND ARM PROTECTION

- Gloves (including mittens and arm protection) against:
  - Mechanical risks
  - Thermal risks (heat, flame and cold)
  - Electric shock and live working (antistatic, conductive, insulating)
  - Chemical risks
  - Biological agents
  - Ionizing radiation and radioactive contamination
  - Non-ionizing radiation (UV, IR, solar or welding radiation)
  - Vibration risks
- Finger stalls

#### Equipment for FOOT AND LEG PROTECTION and anti-slip protection

- Footwear (e.g. shoes, including in certain circumstances clogs, boots that may have steel toe-caps) to protect against:
  - Mechanical risks
  - Slipping risks
  - Thermal risks (heat, flame and cold)
  - Electric shock and live working (antistatic, conductive, insulating)
  - Chemicals risks
  - Vibration risks
  - Biological risks
- Removable instep protectors against mechanical risks
- Kneepads against mechanical risks
- Gaiters against mechanical, thermal and chemical risks and biological agents
- Accessories (e.g. spikes, crampons)

## SKIN PROTECTION — BARRIER CREAMS<sup>(11)</sup>

- There could be barrier creams to protect against:
  - Non ionizing radiation (UV, IR, solar or welding radiation)
  - Ionizing radiation
  - Chemicals
  - Biological agents
  - Thermal risks (heat, flame and cold)

## Equipment for BODY PROTECTION/OTHER SKIN PROTECTION

- Personal protective equipment for protection against falls from a height, such as retractable type fall arresters, full body harnesses, sit harnesses, belts for work positioning and restraint and work positioning lanyards, energy absorbers, guidedtype fall arresters including an anchor line, rope adjustment devices, anchor devices that are not designed to be permanently fixed and that do not require fastening works before use, connectors, lanyards, rescue harness
- Protective clothing, including whole body (i.e. suits, overalls) protection and partial body (i.e. gaiters, trousers, jackets, waistcoats, aprons, kneepads, hoods, balaclavas) protection against:
  - Mechanical risks
  - Thermal risks (heat, flame and cold)
  - Chemicals
  - Biological agents
  - Ionizing radiation and radioactive contamination
    - Non-ionizing radiation (UV, IR, solar or welding radiation)
  - Electric shock and live working (antistatic, conductive, insulating)
  - Entanglement and trapping
- Lifejackets for prevention of drowning and buoyancy aids
- PPE for signalling the user's presence visually
- (3) Annex III to Directive 89/656/EEC is replaced by the following:

#### ANNEX NON-EXHAUSTIVE LIST OF ACTIVITIES AND SECTORS OF ACTIVITY III WHICH MAY REQUIRE THE PROVISION OF PERSONAL PROTECTIVE EQUIPMENT (\*)(\*) The risk assessment will determine the need to provide a PPE and its characteristics according to the provisions of this DirectiveI.PHYSICAL RISKS

Risks	Body part affectedType of PPE	Examples of activities where the use of the corresponding type of PPE may be necessary (*)		Industry and Sectors	
PHYSICAL — ME	CHANICAL				
Impact caused by falling or ejected objects, collision with an obstacle and high-pressure jets	Cranium <b>Protective helmet</b>		Work on, underneath or in the vicinity of scaffolding and elevated workplaces Carcase Work and road work Formwork erection		Building construction Civil engineering construction Machinery manufacturing, installation and maintenance Shipbuilding Mining works Energy production

		and		Infrastructure
		stripping		construction
		Scaffolding	g's	and
		assembly	5-	maintenance
		and		Iron and
		installation		Steel
		Assembly		industry
		and		Slaughterhouses
		installation		Railway
		works	_	shunting
		Demolition	IS	work
	—	Blasting		Harbours,
		works		transport
	—	Work		and
		in pits,		logistics
		trenches,		Forest
		shafts and		Industry
		tunnels		
		Work		
		in the		
		vicinity		
		of lifts,		
		lifting		
		•		
		gear,		
		cranes,		
		and		
		conveyors		
		Works in		
		undergrour	nd	
		workings,		
		quarries,		
		open		
		diggings		
	—	Work		
		with		
		industrial		
		furnaces,		
		containers,		
		machinery,		
		silos,		
		bunkers		
		and		
		pipelines		
			NG NG	
		Slaughterir and	ig	
		Cutting		
		line at		
		slaughterho	ouses	
	<del></del>	Load		
		handling		
		or		
		Transport		
'		- '		

> and storage Forest work Work on steel bridges, steel building construction, steel hydraulic structures, blast furnaces, steel works and rolling mills, large containers. large pipelines, boiler plants and power stations Earth and rock works Work with boltdriving tools Work with blast furnaces, direct reduction plants, steelworks rolling mills, metalworks, forging, drop forging and casting Work involving

		travelling on bicycles and mechanica propelled bikes	lly	
Eyes and/or face Spectacles, goggles and face shields	_	Welding, grinding and separating work Manual		Building construction Civil engineering construction Machinery manufacturing,
		hammering Caulking and chiselling		installation and maintenance
	-	Rock working and		Shipbuilding Mining works
	_	processing Work with bolt- driving		Energy production Infrastructure construction
	_	tools Work on stock removing		and maintenance Iron and Steel
		machines for small chippings Drop		industries Metal and Wood industries
		forging The removal and breaking		Stone carving Gardening Healthcare Forestry
	_	up of fragments Spraying of		1 01050 y
	_	abrasive substances Use of brush		
	_	cutter or chainsaw Dental and surgical procedures		

[				
Foot and leg (parts)	—	Carcase	—	Building
Footwear (shoes/		Work		construction
boots, etc.)		and road	—	Civil
with safety or		work		engineering
protective toecap	—	Erection		construction
Footwear with		and	—	Machinery
metatarsal		stripping		manufacturing,
protection		of		installation
		formwork		and
	—	Scaffolding	g's	maintenance
		assembly	—	Shipbuilding
		and	—	Mining
		installation		works
	—	Demolition	ns—	Energy
	—	Blasting		production
		works	—	Infrastructure
		Working		construction
		and		and
		processing		maintenance
		of rock	—	Iron and
	—	Slaughterir	ng	Steel
		and		industry
		Cutting	—	Slaughterhouses
		line	—	Logistic
		works		Companies
	—	Transport	—	Manufacturing
		and		Industry
		storage	—	Glass
	—	Work		Industry
		with	—	Forest
		moulds		Industry
		in the .		
		ceramics		
		industry		
	-	Work		
		with		
		frozen		
		meat		
		blocks		
		and		
		preserved		
		foods		
		packaging		
		Flat glass		
		products		
		and		
		container		
		glassware		
		manufactu	le,	
		working		
		and		
		processing		

l	Conversion
	and
	maintenance
	work
	Forest
	works
	Work
	with
	concrete
	and
	prefabricated
	parts
	involving
	formwork
	erection
	and
	stripping
—	Work in
	contractors'
	yards and
	warehouses
	Roof
	work
	Work
	on steel
	bridges,
	steel
	building
	construction,
	masts,
	towers,
	lifts, steel
	hydraulic
	structures,
	blast
	furnaces,
	steelworks
	and
	rolling
	mills,
	large
	containers,
	large
	pipelines,
	cranes,
	boiler
	plants
	and
	power
	stations
<b>—</b>	Furnace
	construction,
	heating

		and ventilation installation and metal assembly work Work with blast furnaces, direct reduction plants, steelworks rolling mills, metal works, forging, drop forging, hot pressing and drawing plants Work in quarries and open diggings, coal stock removal Work with moulds in the ceramics industry Lining of kilns in the ceramics industry Railway shunting work	
Falls due to slipping	Foot Slip-resistant footwear	 Works on slippery surfaces Works on humidity environme	 Building construction Civil engineering construction Shipbuilding Slaughterhouse

			<ul> <li>Cleaning</li> <li>Food</li> <li>industries</li> <li>Gardening</li> <li>Fishing</li> <li>industry</li> </ul>
Falls from a height	Whole body PPE designed to prevent or arrest falls from height	Work on scaffolding Assembly — of prefabricated parts — Works on — masts Roof work Work on vertical or slope surfaces Work in high crane cabs Work in high crane cabs Work in high cabs of warehouse stacking and retrieval equipment Work in high sections of drilling towers Work in shafts and sewers	<ul> <li>Building construction</li> <li>Civil engineering construction</li> <li>Shipbuilding</li> <li>Infrastructure maintenance</li> </ul>
Vibration	Hands <b>Protective Gloves</b>	 Works – with hand- – guided tools –	<ul> <li>Manufacturing industries</li> <li>Building work</li> <li>Civil Engineering work</li> </ul>
Static compression of parts of the body	Knee (leg parts) Kneepads	 Installation – of blocks, tiles and	- Building construction

	Foot Footwear with	_	pavers on the floor Demolition Load	 15	Civil engineering construction Building construction
	toecaps		handling		Civil engineering construction Transport and storage Maintenance
Mechanical injuries (abrasion, perforation, cuts, bites, wounds or stabs)	Eyes and/or face Spectacles, goggles, face shields		Works with hand- guided tools Welding and forging Grinding and separating work Chiselling Rock working and processing Work on stock removing machines for small chippings Drop forging The removal and breaking up of fragments Spraying of abrasive substances Use of brush cutter or chainsaw		Building construction Civil engineering construction Shipbuilding Mining works Energy production Infrastructure maintenance Iron and Steel industries Metal and Wood industries Stone carving Gardening Forestry

Hands	—	Works —	Building
Mechanical protective gloves		with steel framework —	construction Civil
F 8		Handling	engineering
		of sharp-	construction
		edged —	Shipbuilding
		objects, —	Infrastructur
		other than	maintenance
		machines — where	Manufacturin industries
		there is —	Food
		a danger	industry
		of the —	Slaughter
		gloves —	Forest
		being	industry
		caught	
	-	Regular	
		cutting	
		using a hand	
		knife for	
		production	
		and	
		slaughtering	
	<u> </u>	Changing	
		the	
		knives of	
		cutting machines	
		Forest	
		works	
	_	Gardening	
		work	
Forearms		Boning —	Food
Arm protection		and	industry
		cutting —	Slaughter
Trunk/Abdomen/	—	Regular —	Food
Leg Protoctivo oprop		cutting	industry Sloughtor
Protective apron, gaiters		using — a hand —	Slaughter Forest
Penetration		knife for	industry
resistance		production	maastry
trousers (cut-		and	
resistant trousers)		slaughtering	
		Forest works	
Foot		Carcase —	Building
	<u> </u>	works	construction
Penetration	1		Civil
Penetration resistance		and road $\parallel$ —	CIVII
resistance footwear		and road — works	engineering

			Formwork' erection and stripping Forest works	s— —	Shipbuilding Mining works Forest industry
Entanglement and trapping	Whole body <b>Protective</b> clothing for use where there is a risk of entanglement with moving parts		Entangle oneself in parts of machines Get caught in parts of machines Get caught with garment in parts of machines Get swept away		Machine building Manufacture of heavy- duty machines Engineering Construction Agriculture
PHYSICAL – NO	ISE				
Noise	Ears Hearing protectors		Work with metal presses Work with		Metal Industry Manufacturing industry Building construction
			pneumatic drills The work of ground staff at	_	Civil engineering construction Aeronautical industry
		—	airports Works with power	_	Mining works
		_	tools Blasting		
		_	works Pile- driving		
			work Wood and textile		
PHYSICAL — TH	FRMAI		working		
Heat and/or fire	Face/Whole head Welding headshields,		Work in presence of high		Iron and Steel Industry

helmets/caps against heat or fire, protective hoods against heat and/or flame		temperatur radiating heat or fire Work with or in the vicinity of molten substances Work with welding plastics guns	e <del>s,</del> 	Metal Industry Maintenance services Manufacturing Industry
Trunk/abdomen/ legs <b>Protective apron,</b> gaiters	_	Welding and forging Casting		Iron and Steel Industry Metal Industry Maintenance services Manufacturing industry
Hand Protective gloves against heat and/ or flame		Welding and forging Work in presence of high temperatur radiating heat or fire Work with or in the vicinity of molten substances	 es, 	Iron and Steel Industry Metal Industry Maintenance services Manufacturing industry
Forearms Sleeves		Welding and forging Work with or in the vicinity of molten substances		Iron and Steel Industry Metal Industry Maintenance services Manufacturing industry

Foot Footwear against heat and/or flame	 Work with or in the vicinity of molten substances		Iron and Steel Industry Metal Industry Maintenance services Manufacturing industry
Whole/partial body <b>Protective</b> clothing against heat and/or flame	Work in presence of high temperatur radiating heat or fire	 e <del>s,</del>	Iron and Steel Industry Metal Industry Forest Industry
Cold Hand Protective gloves against cold Foot Footwear against cold	 Work in the open air in extreme cold conditions Work in deep- freeze rooms Work with cryogenic liquids		Building construction Civil engineering construction Shipbuilding Mining works Food Industry Agriculture and fisheries sector
Whole/partial body including head <b>Protective</b> clothing against cold	 Work in the open air in cold weather conditions Work in deep- freeze rooms		Building construction Civil engineering construction Shipbuilding Mining works Food Industry Agriculture and fisheries sector Transport and storage
PHYSICAL — ELECTRICAL			

Electric shock (direct or indirect contact)	Whole head Electrically insulating helmets Hands Electrically insulating gloves Foot Electrically insulating footwear Whole body/ Hands/Foot Conductive PPE intended to be worn by skilled persons during live working at a nominal power system voltage up to 800 kV AC and 600 kV DC	 Live working or close to live parts under electrical tension Work on electrical system	 Energy production Transmission and distribution of electrical energy Industrial facilities maintenance Building construction Civil engineering construction
Static electricity	Hands Antistatic gloves Foot Antistatic/ conductivefootwear Whole body Antistatic clothing	 Handling plastic and rubber Pouring, collecting or loading into a container Work near to highly charged elements such as conveyor belts Handling explosives	 Manufacturing industry Feed industry Bagging and packing plants Production, storage or transport of explosives
PHYSICAL — RA Non-ionizing radiation, including sunlight (other than direct observation)	DIATION Head <b>Caps and helmets</b>	 Work in open air	 Fishing and agriculture Building construction Civil engineering construction

	Eyes <b>Protective</b> <b>spectacles, goggles</b> <b>and face shields</b>	Work with radiant heat Furnace operations Work with laser Work in open air Welding and gas cutting Glass blowing Germicida lamps	Iron and Steel Industries Manufacturing industry Fishing and agriculture
	Whole body (skin) <b>PPE against</b> <b>Natural and</b> <b>artificial UV</b>	Work in the open air Electrical welding Germicida lamps Xenon lamps	Building construction Civil engineering construction Shipbuilding Mining works Energy production Infrastructure maintenance Fishing and agriculture Forest industry Gardening Food industry Plastic industry Printing industry
Ionizing radiation	Eyes <b>Protective</b> <b>spectacles/goggles</b> <b>against ionizing</b> <b>radiation</b> Hands <b>Protective gloves</b> <b>against ionizing</b> <b>radiation</b>	 Operating in X-ray facilities Operating in the area of medical radio diagnosis	 Healthcare Veterinary care Radioactive waste plant Energy production

	-	Work with radioactive products	
Trunk/abdomen/ partial body <b>Protective apron</b> <b>against x-rays</b> /Coat/Vest/Skirt <b>against x-rays</b>		Operating in X-ray facilities Operating in the area of medical radio diagnosis	Healthcare Veterinary care Dental care Urology Surgery Interventional radiology Laboratories
Head Headwear & Caps PPE for protection against e.g. development of brain tumours		Medical X-ray work places and facilities	 Healthcare Veterinary care Dental care Urology Surgery Interventional radiology
Partial body PPE for thyroid protection PPE for gonads protection		Operating in X-ray facilities Operating in the area of medical radio diagnosis	 Healthcare Veterinary care
Whole body <b>Protective</b> clothing against ionizing radiation		Operating in the area of medical radio diagnosis Work with radioactive products	Energy production Radioactive waste plant

II.CHEMICAL RISKS (including nanomaterial)

Risks	Body part affectedType of PPE	Examples of activities where the use of the corresponding	Industry and Sectors
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			PPE may essary (*)		
CHEMICAL — A	EROSOLS		/	1	
CHEMICAL — A Solid (dusts, fumes, smokes, fibres, and nano- material)	EROSOLS Respiratory system Respiratory protective devices against particles				Building construction Civil engineering construction Shipbuilding Mining works Iron and Steel industries Metal and Wood industries Automotive industry Stone carving Pharmaceutical industry Healthcare services Preparation of cytostatics
			of blast furnace taps where there may be heavy metal fumes Work in the vicinity of the blast furnace charge		
	Hands	<u> </u>	Work in presence		Building construction

	Chemical Protective gloves and barrier cream as an additional/ accessory protection	 of asbestos Use of materials – consisting – of/ containing nanoparticles		Civil engineering construction Shipbuilding Industrial facilities maintenance
	Whole body Protective clothing against solid particles	 Demolition – Work in presence – of asbestos Use of – materials – consisting of/ containing – nanoparticles Chimney sweeper Preparation of plant protection products	_	Building construction Civil engineering construction Shipbuilding Industrial facilities maintenance Agriculture
	Eyes <b>Spectacles/goggles</b> <b>and face shields</b>	 Woodworkin Road work –	<del>ng</del> 	Mining industry Metal and wood industry Civil engineering construction
Liquid (mists and fogs)	Respiratory system <b>Respiratory</b> <b>protective devices</b> <b>against particles</b>	 Surface – treatment (e.g. – varnishing/ painting, – abrasive blasting) Surface cleaning		Metal Industry Manufacturing Industry Automotive sector
	Hands Chemical protective gloves	 Surface - treatment Surface - cleaning Work - with liquid sprays	_	Metal Industry Manufacturing industry Automotive sector

			Works with acids and caustic solutions, disinfectan and corrosive cleaning substances		
	Whole body Chemical protective clothing		Surface treatment Surface cleaning		Metal Industry Manufacturing industry Automotive sector
CHEMICAL — LI		1		1	
Immersion Splashes, sprays and jets	Hands Chemical protective gloves,		Work with liquid sprays Works with acids and caustic solutions, disinfectan and corrosive cleaning products Processing of coating materials Tanning Work in hairdresser and beauty salons		Textile and clothing industry Cleaning industry Automobile industry Beauty and hairdressing sectors
	Forearms Chemical protective sleeves		Works with acids and caustic solutions, disinfectan and corrosive cleaning products		Cleaning Chemical industry Cleaning industry Automobile industry

	Foot <b>Chemical</b> <b>protective boots</b>	 Work with liquid sprays Works with acids and caustic solutions, disinfectan and corrosive cleaning products	  ts	Textile and clothing industry Cleaning industry Automobile industry
	Whole body Chemical protectiveclothing	 Work with liquid sprays Works with acids and caustic solutions, disinfectan and corrosive cleaning products	   ts	Cleaning Chemical industry Cleaning industry Automobile industry Agriculture
Gases and vapours	Respiratory system Respiratory protective devices against gases	 Surface treatment (e.g. varnishing, painting, abrasive blasting) Surface cleaning Work in fermentation and distilling rooms Work inside tanks and digesters Work in	  	Metal Industry Automotive sector Manufacturing industry Cleaning industry Alcoholic drinks production Wastewater treatment plants Waste treatment plant Chemical Industry
		 Work in fermentation and distilling rooms Work inside tanks and digesters	 	drinks production Wastewa treatment plants Waste treatment plant Chemica

Whole body Chemical protective		gas-fired industrial furnaces where there may be gas or insufficient oxygen Surface treatment Surface		Petrochemical industry Metal Industry Automotive
	_	Work inside tanks and digesters Work in containers, restricted areas and	_ _ _	Wastewater treatment plants Waste treatment plant Chemical Industry
Hands Chemical protective gloves	_	Surface treatment Surface cleaning Work in fermentation and distilling rooms	  	Metal Industry Automotive sector Manufacturing industry Alcoholic drinks production
		gas-fired industrial furnaces where there may be gas or insufficient oxygen Chimney sweeper Disinfectar and corrosive cleaning substances Work in the vicinity of gas converters and blast furnace gas pipes		

	 Work in fermentation and distilling rooms Work inside tanks and digesters Work in containers, restricted areas and gas-fired industrial furnaces where there may be gas or insufficient oxygen	 Manufacturing industry Alcoholic drinks production Wastewater treatment plants Waste treatment plant Chemical Industry Petrochemical industry
Eyes <b>Spectacles,</b> goggles and face shields	 Spray painting Woodwork Mining operations	 Automotive sector Manufacturing industry Mine industry Chemical Industry Petrochemical industry

## **III.BIOLOGICAL AGENTS**

Risks	Body part affectedType of PPE	Examples of activities where the use of the corresponding type of PPE may be necessary (*)		Industry and Sectors	
BIOLOGICAL AG	ENTS (contained in)	- AEROS	SOLS	-	
Solids and liquids	Respiratory system Respiratory protective devices against particles		Work that involve contact with human body and animal fluids and tissues		Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes

			Work in presence of biological agent		Homes assistances Wastewater treatment plants Waste treatment plant Food Industry Biochemical production
	Hands <b>Protective</b> <b>gloves against</b> <b>microorganisms</b> Whole/partial body <b>Protective</b> <b>clothing against</b> <b>biological agents</b> Eyes and/or face <b>Protective</b> <b>spectacles, goggles</b> <b>and face shields</b>		Work that involve contact with human body and animal fluids and tissues Work in presence of biological agent		Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant Food Industry
BIOLOGICAL AG	ENTS (contained in)	- LIQUIE	DS	1	
Direct and indirect contact	Hands <b>Protective</b> <b>gloves against</b> <b>microorganisms</b> Whole/partial body <b>Protective</b> <b>clothing against</b> <b>biological agents</b> Eyes and/or face <b>Protective goggles</b> <b>and face shields</b>		Work that involve contact with human body and animal fluids and tissues (bites, stings) Work in presence of biological agent		Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant

			 Food Industry Forest industry
Splashes, sprays and jets	Hands Protective gloves against microorganisms	 Work that involve contact with human body and animal fluids and tissues Work in presence of biological agent	Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant Food Industry
	Forearms Protective sleeves against microorganisms	Work that involve contact with human body and animal fluids and tissues Work in presence of biological agent	Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant Food Industry
	Foot/legs <b>Protective over</b> <b>boots and gaiters</b>	 Work that involve contact with human body and animal	 Healthcare Veterinary clinics Clinical analysis laboratories

	 fluids and tissues Work in presence of biological agent	Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant Food Industry
Whole body Protective clothing against biological agents	 Work that involve contact with human body and animal fluids and tissues Work in presence of biological agent	Healthcare Veterinary clinics Clinical analysis laboratories Research Laboratories Retirement homes Homes assistances Wastewater treatment plants Waste treatment plant Food Industry

BIOLOGICAL AGENTS (contained in) – MATERIALS, PERSONS, ANIMALS, ETC.

Direct and	Hands		Work that		Healthcare
indirect contact	Protective		involve	—	Veterinary
	gloves against		contact		clinics
	microorganisms		with	—	Clinical
	Whole/partial body		human		analysis
	Protective		body and		laboratories
	clothing against		animal	—	Research
	biological agents		fluids and		Laboratories
	Eyes and/or face		tissues	—	Retirement
	<b>Protective goggles</b>		(bites,		homes
	and face shields		stings)	—	Homes
		—	Work in		assistances
			presence	—	Wastewater
			of		treatment
			biological		plants
			agent		



#### **IV.OTHER RISKS**

Risks	Body part affectedType of PPE	Examples of activities whe the use of the corresponding type of PPE n be necessary (	re Sectors g nay	Industry and Sectors	
Non-visibility	Whole body <b>PPE for signalling</b> <b>the user's</b> <b>presence visually</b>	<ul> <li>Work proxin of move of wehic?</li> <li>Aspha works and romarki marki</li> <li>Railw works</li> <li>Drivin means transp</li> <li>Work groun staff a airpor</li> </ul>	mity ment les — alt — soad — ing yay song s of oort of id at	Building construction Civil engineering construction Shipbuilding Mining works Transport services and passengers transports	
Oxygen deficiency	Respiratory system Insulating respiratory protectives devices	<ul> <li>Work confin space</li> <li>Work ferme and distill rooms</li> <li>Work inside tanks digest</li> <li>Work contai restric areas gas-fi</li> </ul>	ned s in — entation ing — s and ters in iners, cted and	Alcoholic drinks production Civil engineering construction Chemical Industry Petrochemic industry	

		 industrial furnaces where there may be gas or insufficien oxygen Work in shafts, sewers and other undergroun areas connected with sewage		
	Respiratory system <b>Diving equipment</b>	 Underwate works	r	Civil engineering construction
Drowning	Whole body Life jacket	 Work on or near water Work in the sea Work in an airplane		Fishing industry Aeronautical industry Building construction Civil engineering construction Shipbuilding Docks and harbours

#### (1) OJ L 393, 30.12.1989, p. 18.

- (2) European Pillar of Social Rights, 2017, https://ec.europa.eu/commission/sites/beta-political/files/ social-summit-european-pillar-social-rights-booklet\_en.pdf
- (3) SWD(2017) 10 final
- (4) COM(2017) 12
- (5) Regulation (EU) 2016/425 of the European Parliament and of the Council of 9 March 2016 on personal protective equipment and repealing Council Directive 89/686/EEC (OJ L 81, 31.3.2016, p. 51).
- (6) PPE Regulation Guidelines Guide to application of Regulation (EU) 2016/425 on personal protective equipment, https://ec.europa.eu/docsroom/documents/29201
- (7) Advisory Committee for Safety and Health at Work Doc. 1718/2017
- (8) Advisory Committee for Safety and Health at Work Doc. 443/18
- **(9)** OJ C 369, 17.12.2011, p. 14.
- (10) Council Directive 89/391/EEC of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (OJ L 183, 29.6.1989, p. 1).
- (11) In certain circumstances, as a result of the risk assessment, barrier creams could be used together with other PPE with the aim of protecting workers' skin from related risks. Barrier creams are PPE under the scope of Directive 89/656/EEC as this type of equipment can be considered in certain circumstances as "additional or accessory" within the meaning of Article 2 of Directive 89/656/ EEC. However, barrier creams are not PPE according to the definition in Article 3(1) of Regulation (EU) 2016/425.