ESTEEM

European Safety Training and Evaluation supporting European Mobility

WALL 1

The material reflects only the authors' views and the European Commission and UK National Agency are not responsible for any use that may be made of the information it contains.

Co-funded by the Erasmus+ Programme of the European Union

Materials were developed by:

UNIBO Team

(Professor Dina Guglielmi, Professor Marco Giovanni Mariani, Professor Michela Vignoli and Emanuela Valente)

IIPLE Team

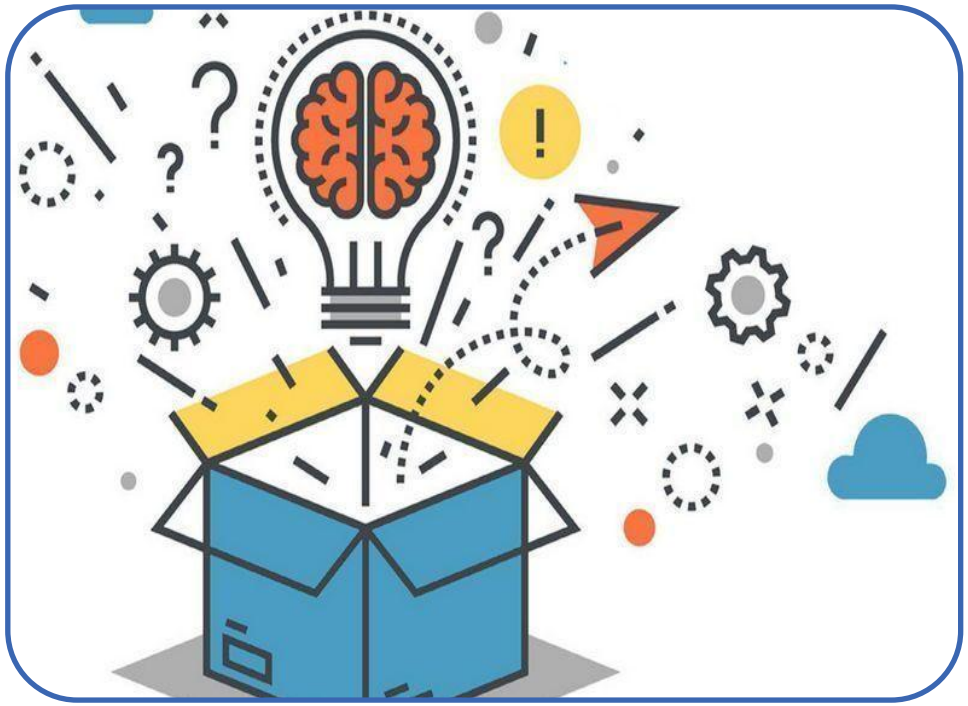
(Gazmend Llanaj)

All the partners of the project collaborated and supervised the Safety Training Package Development

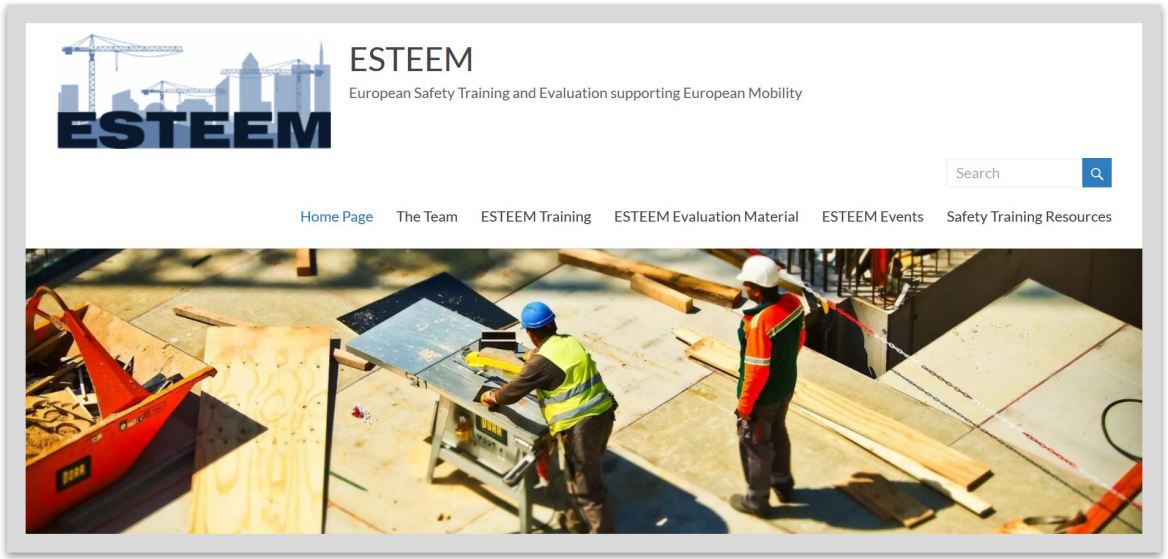
Co-funded by the Erasmus+ Programme of the European Union

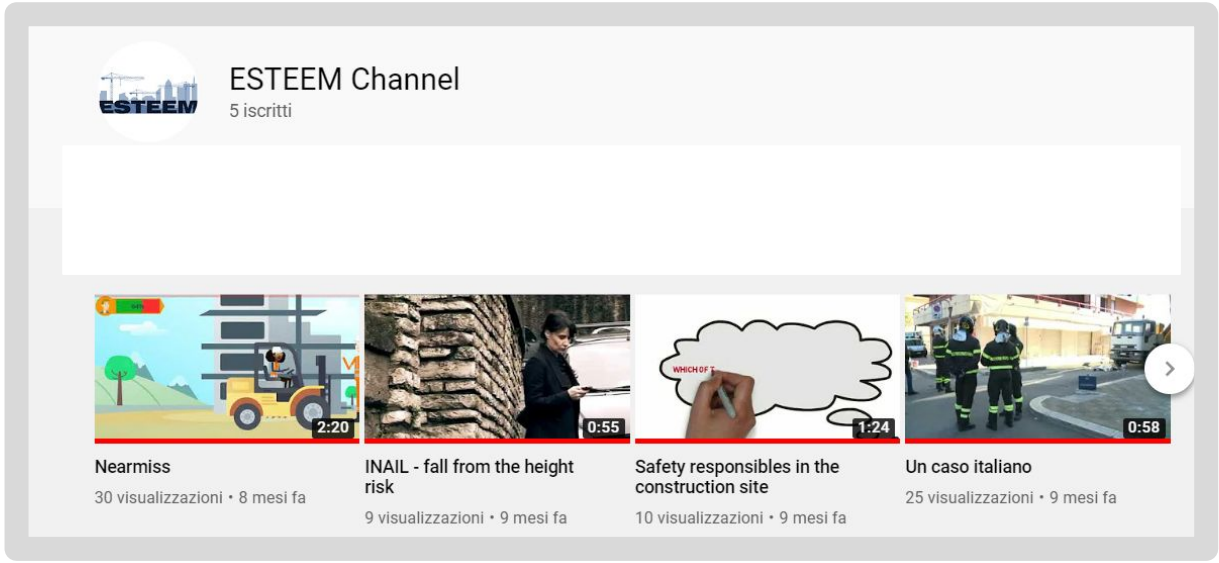
Today we will talk about:

- Added value of ESTEEM project
-  Difference between technical and non-technical skills at work
-  Near misses



Co-funded by the Erasmus+ Programme of the European Union





watch here!
webpage

watch here!
YT channel

Co-funded by the Erasmus+ Programme of the European Union

ESTEEM project presentation: Partners

Leader

The University Of Sheffield.

VNIVERSITAT DE VALÈNCIA

Istituto Istruzione Professionale Lavoratori Edili di Bologna e provincia

valora prevención

Strategic partner

Co-funded by the Erasmus+ Programme of the European Union

ESTEEM project presentation: main objective

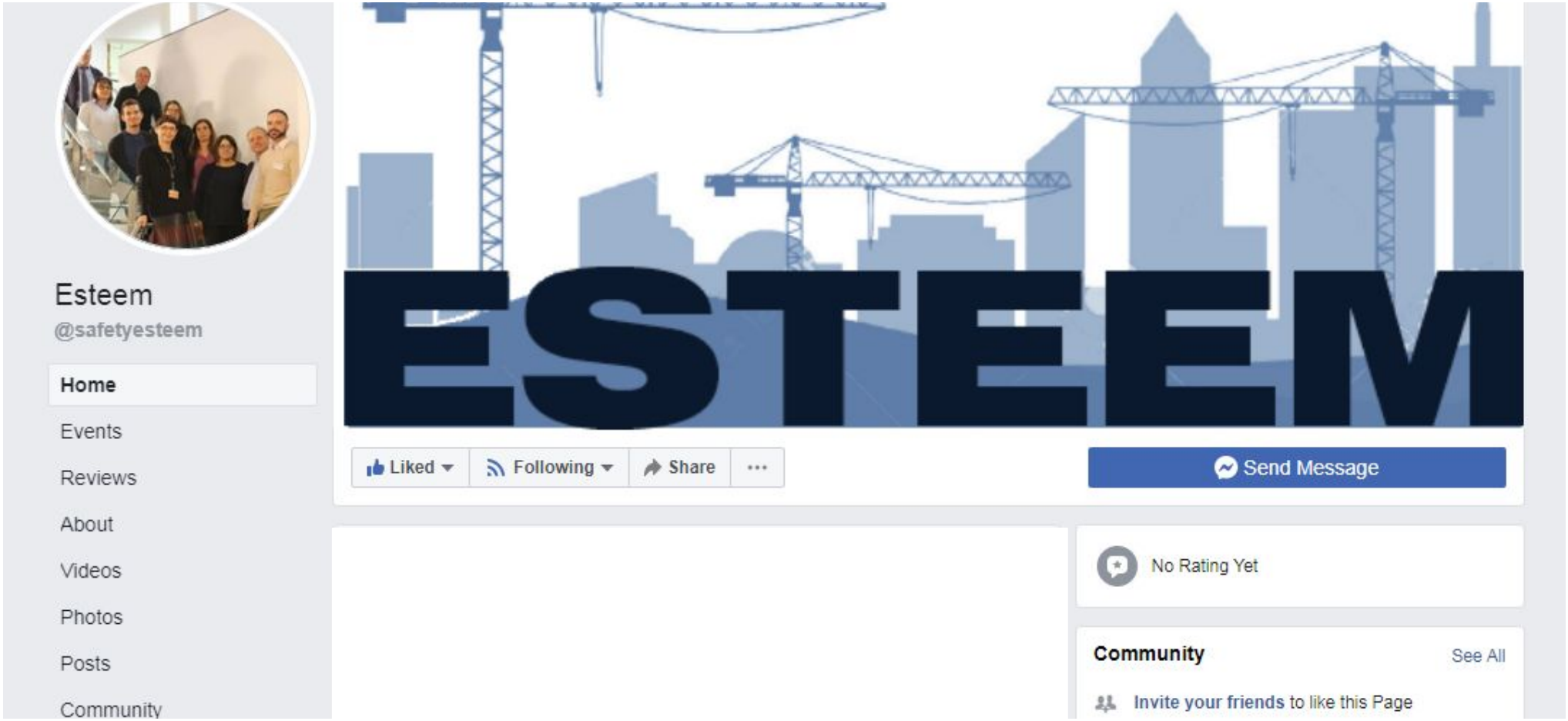
Supporting and promoting quality in occupational **safety training**, specifically for the most **disadvantaged** (migrants or low-skilled) **workers** in the **construction sector**

Co-funded by the Erasmus+ Programme of the European Union

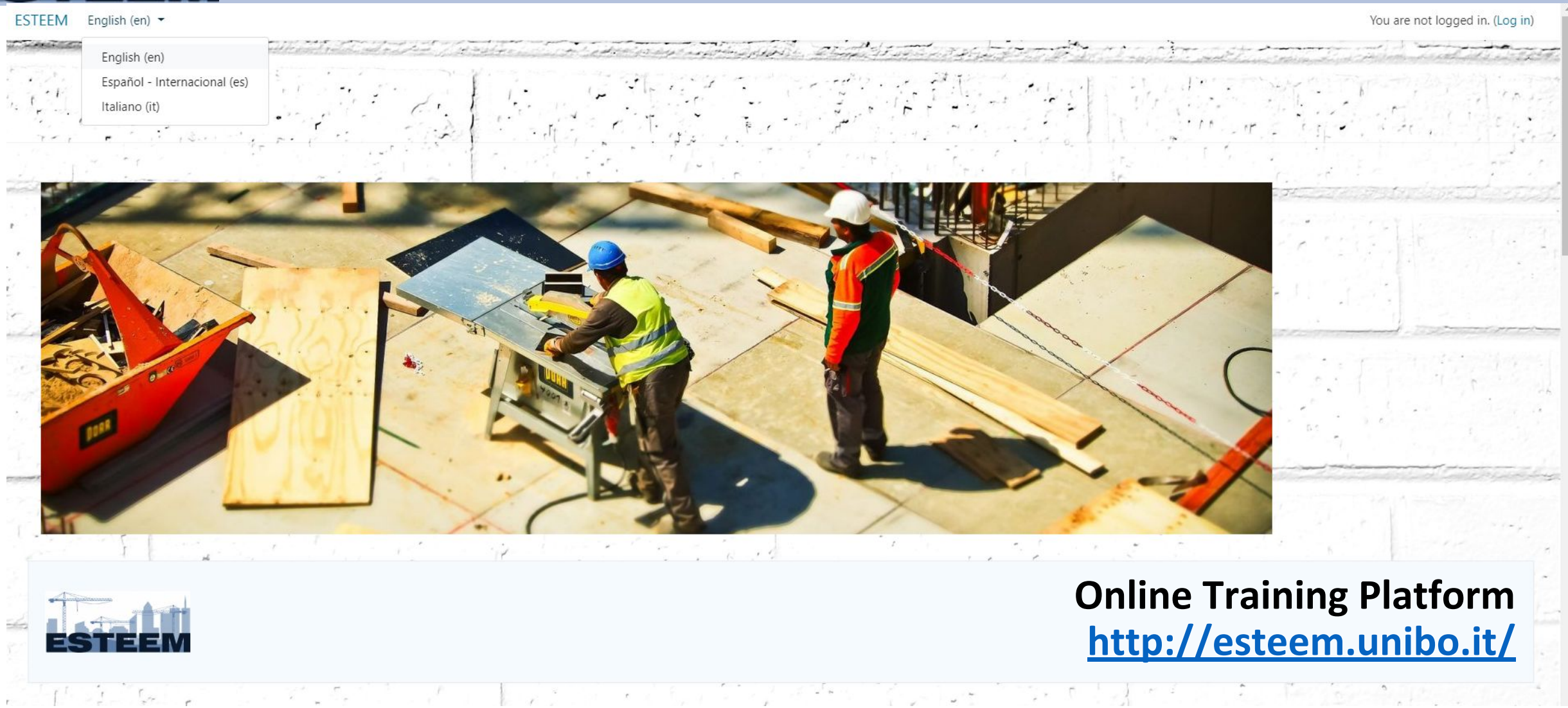
watch here!

Co-funded by the
Erasmus+ Programme
of the European Union

watch here!



Co-funded by the Erasmus+ Programme of the European Union



ESTEEM

Online Training Platform
http://esteem.unibo.it/

Co-funded by the Erasmus+ Programme of the European Union

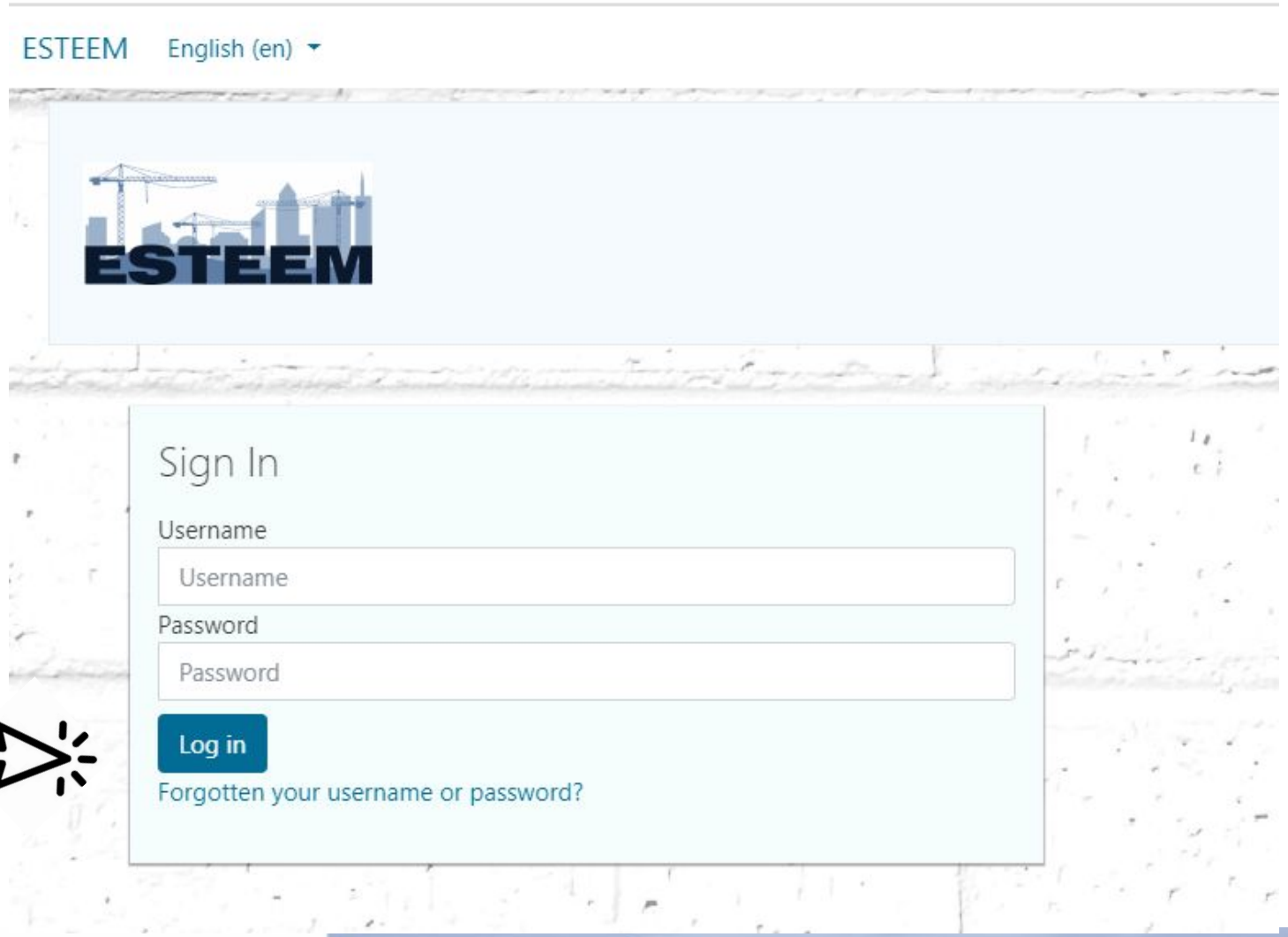
Why is the online platform useful?

1. Repeat and review training content learned

2. Learn more about safety at work

3. Games to test what you've learned

Co-funded by the Erasmus+ Programme of the European Union



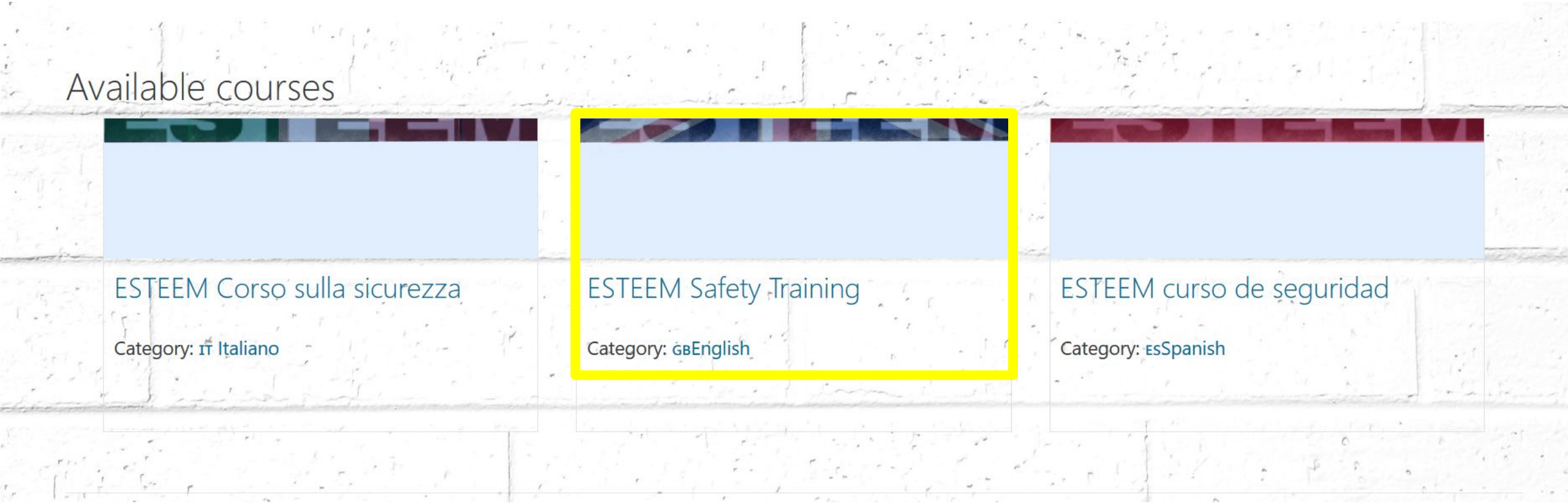
Sign in!

It only takes

5 minutes

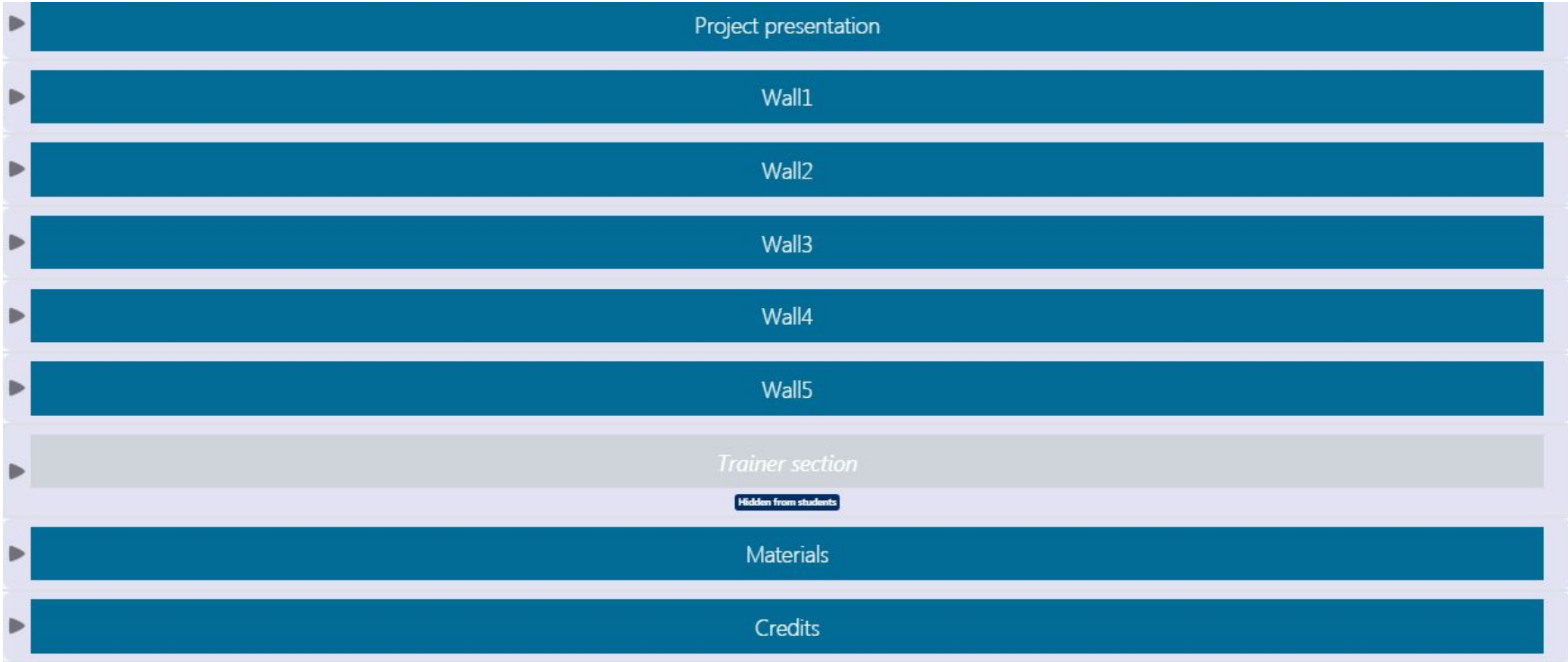
Co-funded by the Erasmus+ Programme of the European Union

Visit the section related to your country of reference



Co-funded by the Erasmus+ Programme of the European Union

View the content of each wall



Co-funded by the Erasmus+ Programme of the European Union

In each wall you can find different kinds of content

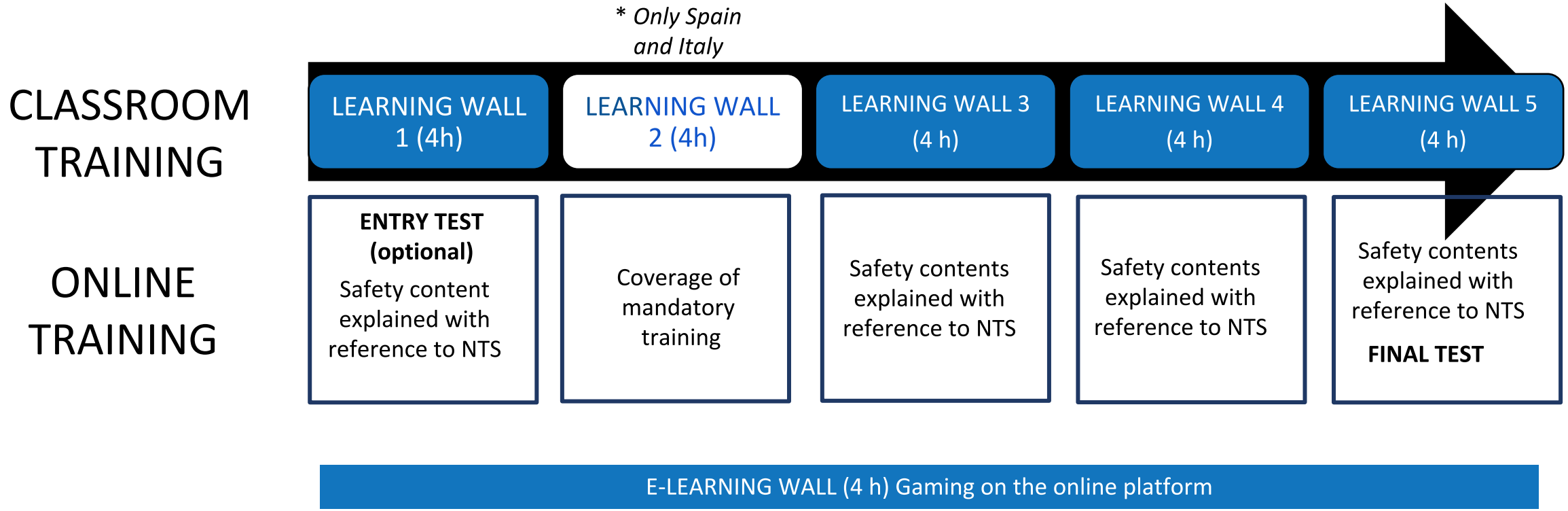
GAMES TO PLAY

APP E LINK

SLIDES

Co-funded by the Erasmus+ Programme of the European Union

Structure of training course



*The content of Wall 2 is only included in the Spanish and the Italian version as the content is covered by the Construction Industry Training Board in the UK

Co-funded by the Erasmus+ Programme of the European Union

"Getting to know each other"!

Participative activity

1) *What is your name?*

2) *Where are you from?*

3) *What is your job?*

4) *In your opinion, what does work safely mean?*

5) *What are your expectations about this course?*

Co-funded by the Erasmus+ Programme of the European Union

Course contents in classroom 1/2

- **Concept** of prevention, protection, accident, occupational disease, hazard, risk assessment
- Organization of prevention and risk assessment
- Basic **theoretical notions** on: hazards, signage, PPE, training obligations




Co-funded by the Erasmus+ Programme of the European Union

Course contents in classroom 2/2

- **Hazards** in the workplace
- **Safety signs**
- Work in conditions of physical stress, time pressure, alcohol consumption
- **Emergency management**

Co-funded by the Erasmus+ Programme of the European Union

Added value of the course

The classic contents of mandatory safety training will be deepened with a focus on “non-technical skills” (NTS) and using **participative teaching** methods

Co-funded by the Erasmus+ Programme of the European Union

Video Analysis

Watch the video focusing on the following questions

Participative activity

- ***What happened*** *in the situation?*
- *What are the* ***elements, steps, procedures*** *and conditions that contributed to the accident?*
- *Do you think such causes* ***could have been avoided****? If yes, how?*

watch here!

Co-funded by the Erasmus+ Programme of the European Union

Technical skills vs. non-technical

Within the work context, people use their skills to perform the work required by their role. These, in particular, can be traced back to two macro categories:

Technical skills

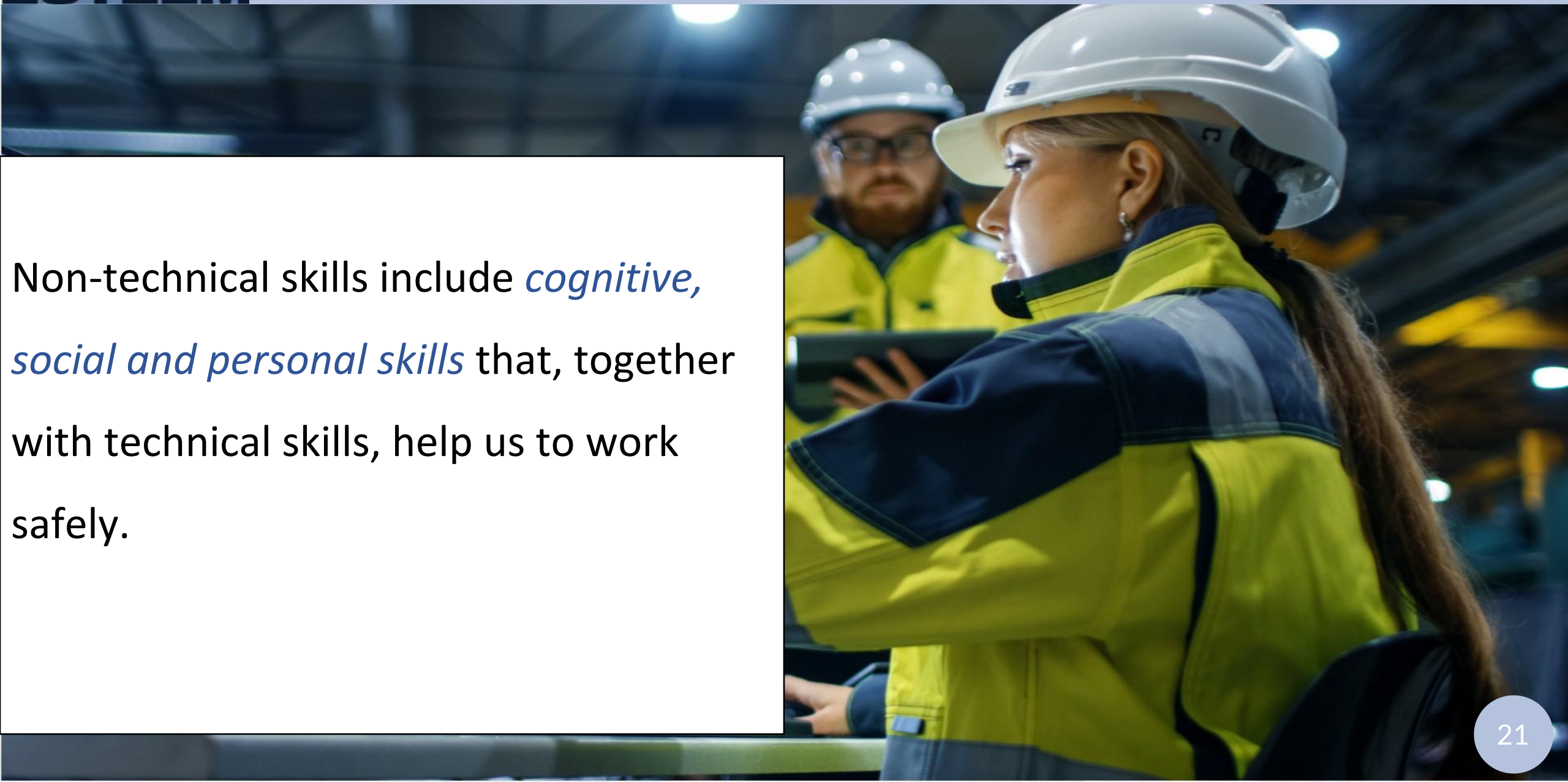
Non-technical skills

Co-funded by the Erasmus+ Programme of the European Union

Technical skills

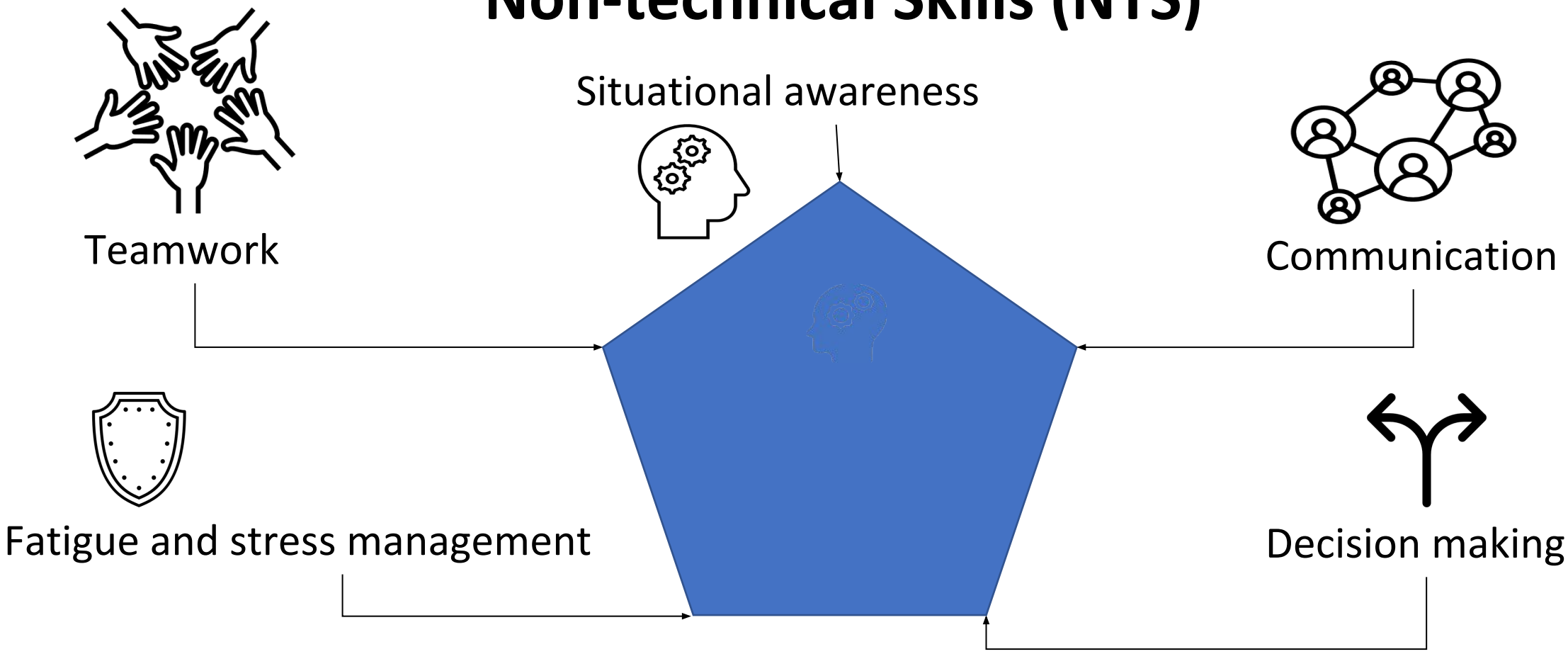
Technical skills refer to the set of skills related to the "technical" performance of a job in safety (such as *knowing how to use* the tools according to the safety rules)

Co-funded by the Erasmus+ Programme of the European Union



Non-technical skills include *cognitive, social and personal skills* that, together with technical skills, help us to work safely.

Non-technical Skills (NTS)



Co-funded by the Erasmus+ Programme of the European Union

NTS definitions:
situational awareness

Monitoring the workplace by observing what happens and *identifying potential hazards* is related with Situational awareness

Co-funded by the Erasmus+ Programme of the European Union

NTS definition: communication

The communication concerns the ability to *receive and transmit information* relevant to one's own safety and that of other people and the environment

Co-funded by the Erasmus+ Programme of the European Union

NTS definitions: decision making

The precise decision concerns the ability to *formulate judgments and/or reach a choice* by evaluating the options available on the basis of safety.

Co-funded by the Erasmus+ Programme of the European Union

NTS definition: fatigue and stress management

Fatigue and stress management refers to the process that allows the worker to *cope with difficult situations* in the workplace, preventing risky situations (for example in case of tiredness)

Co-funded by the Erasmus+ Programme of the European Union

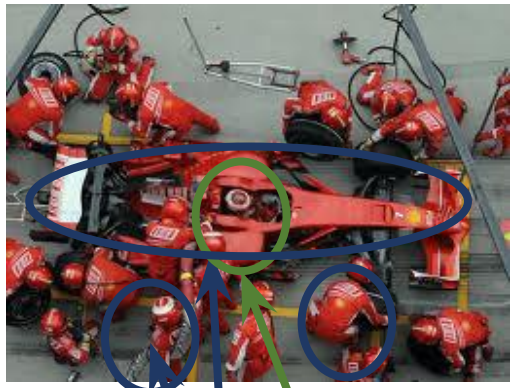
NTS definition: Teamwork

The ability to *work with other* people by promoting their own safety and that of others

Co-funded by the Erasmus+ Programme of the European Union

Competence * **Motivation** = **Performance**

(I can do it) **(I want do it)**



*

=

Technical Skill and Non Techinical Skills

Motivation for Safe Behaviour

Safe / Unsafe Performance

Co-funded by the Erasmus+ Programme of the European Union

Participative activity

Situational awareness

This video will show how we are exposed to numerous dangerous hazards on a daily basis.

While watching the video please **individually note** down the dangers and hazards the protagonist is exposed to.

Co-funded by the Erasmus+ Programme of the European Union

Participative activity

Situational awareness

Sources of hazard are ever present in day to day life. It is therefore important to pay attention to the *elements of the environment* that can expose us to *dangerous situations*.

Co-funded by the Erasmus+ Programme of the European Union

Participative activity

Situational awareness

watch this video and keep in mind the following questions

- *What **situational/ contextual elements** expose the protagonist to risky situations?*
- *What **hazards** is the protagonist in the video exposed to?*
- *How often do you find yourself (in your work or life context) in **similar situations** like the ones shown in the video?*

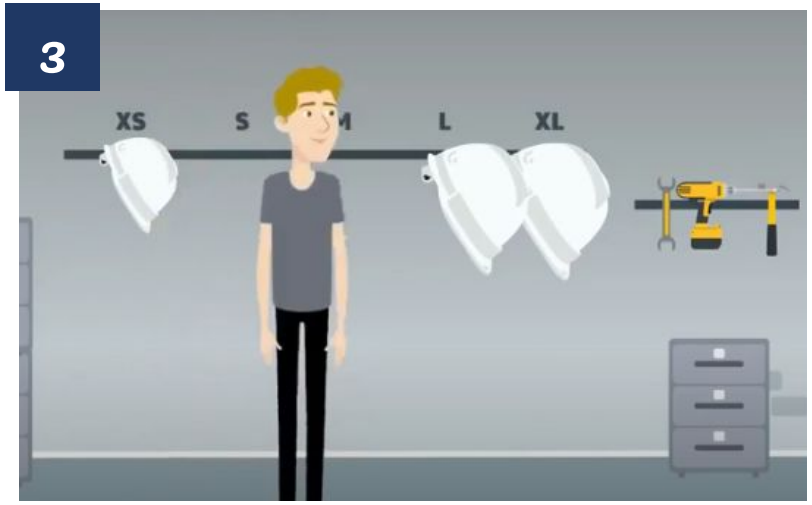
watch here!

Co-funded by the Erasmus+ Programme of the European Union

1

2

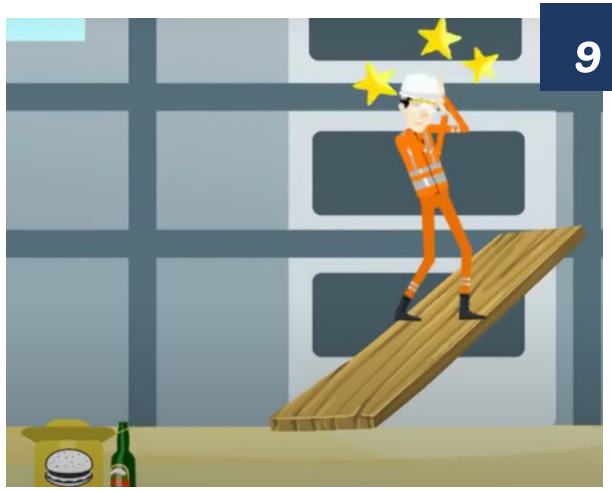
3

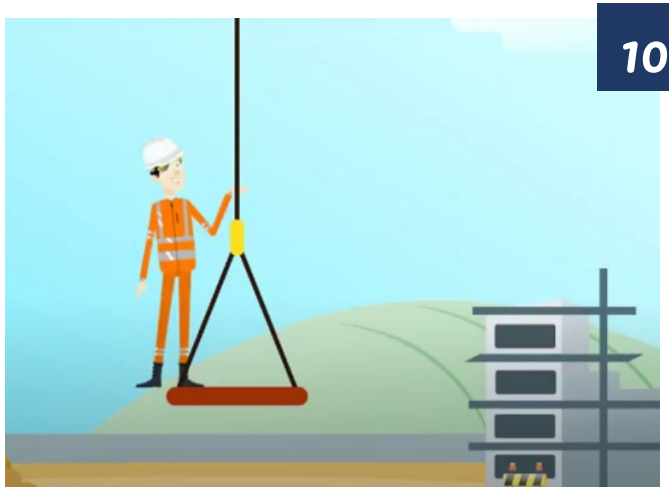


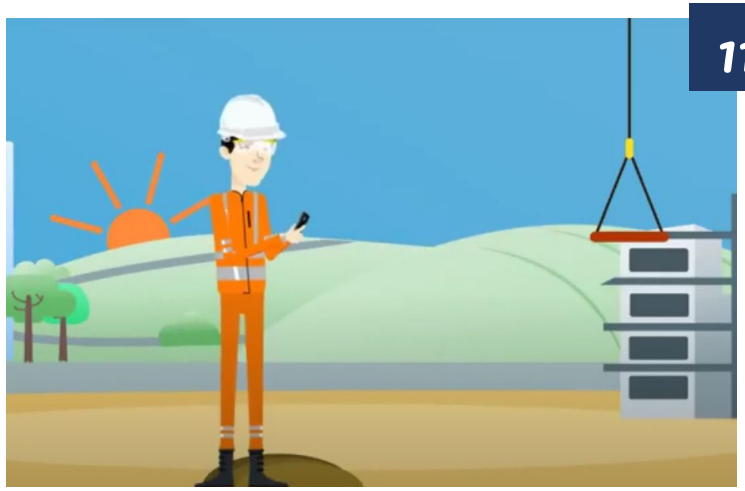
4

5

Co-funded by the Erasmus+ Programme of the European Union







Co-funded by the Erasmus+ Programme of the European Union

From Cartoon to real life (Some examples)

6

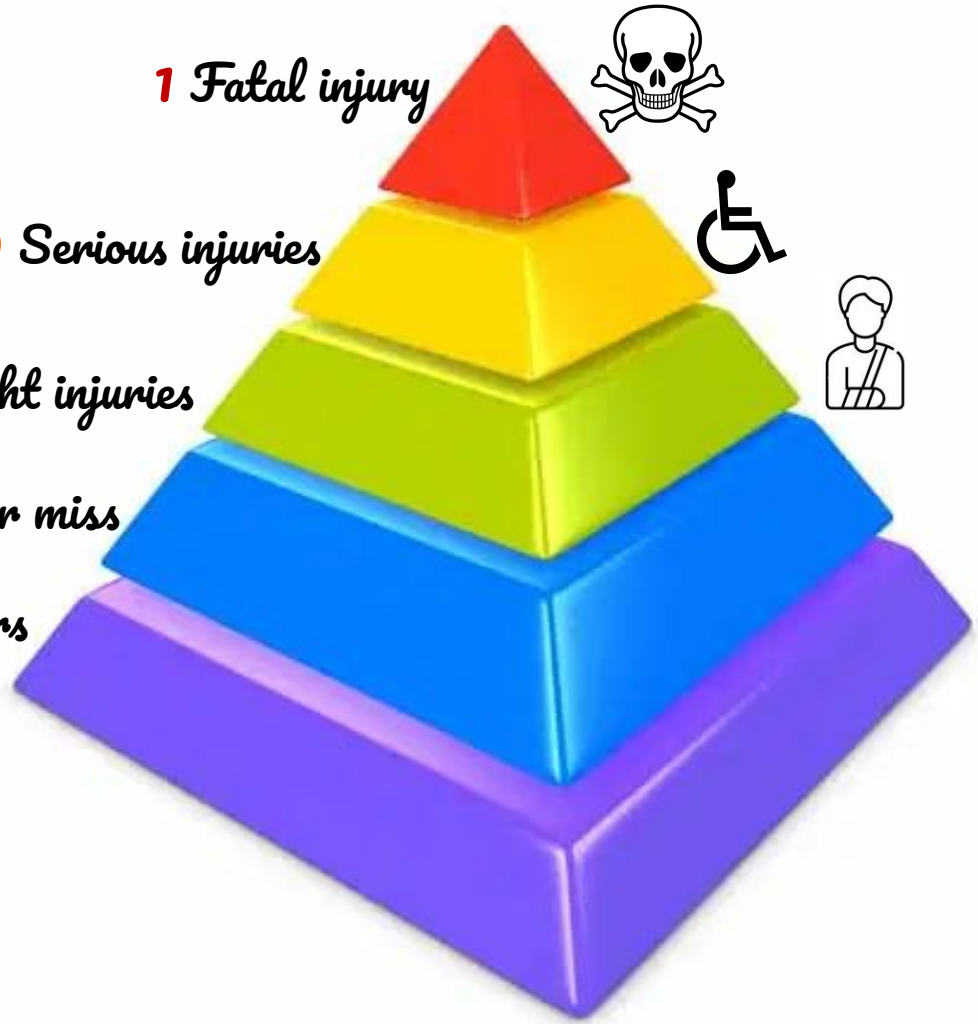
8

7

3

Co-funded by the Erasmus+ Programme of the European Union

Risk pyramid



Injuries depend on **personal decision making** to perform risky behaviours

Co-funded by the Erasmus+ Programme of the European Union

How many work-related accidents happen (in 2017) every day?

81

= about 3.4 an hour

Co-funded by the Erasmus+ Programme of the European Union

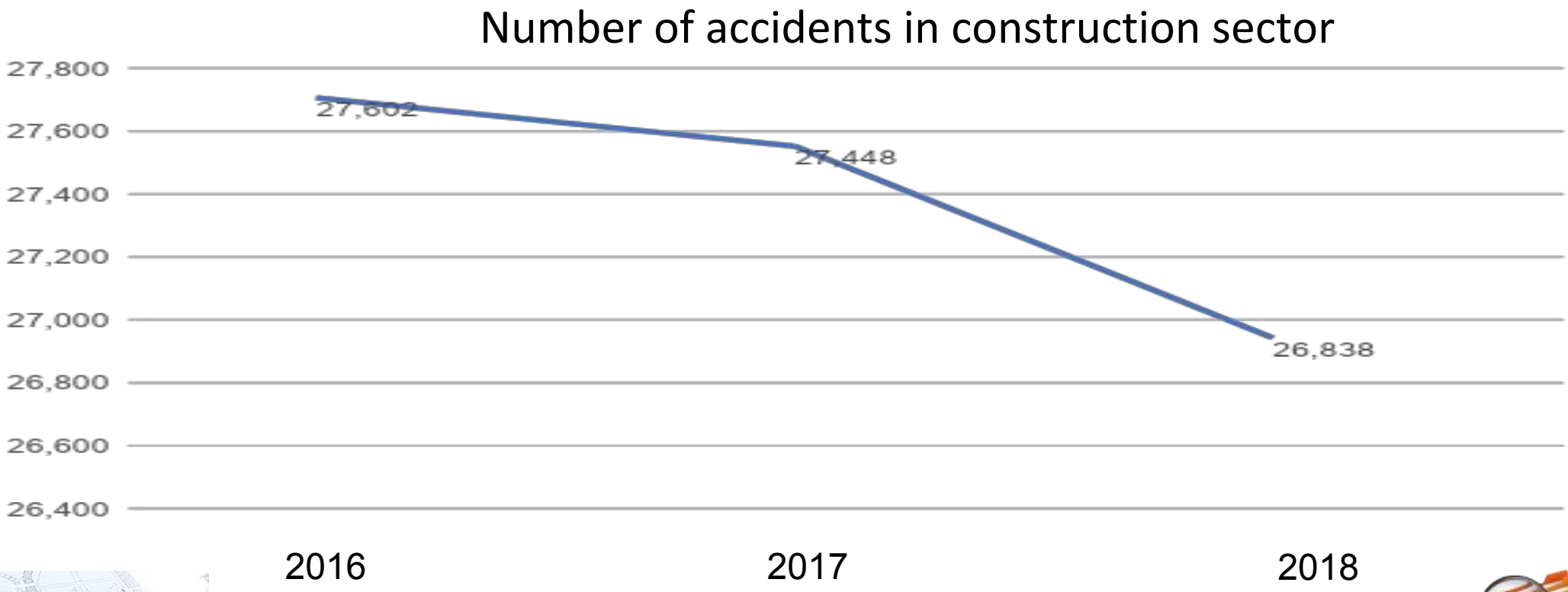
How many FATAL work-related accidents happen (in 2017)

95

= 1 fatal accident every 4 days

Co-funded by the Erasmus+ Programme of the European Union

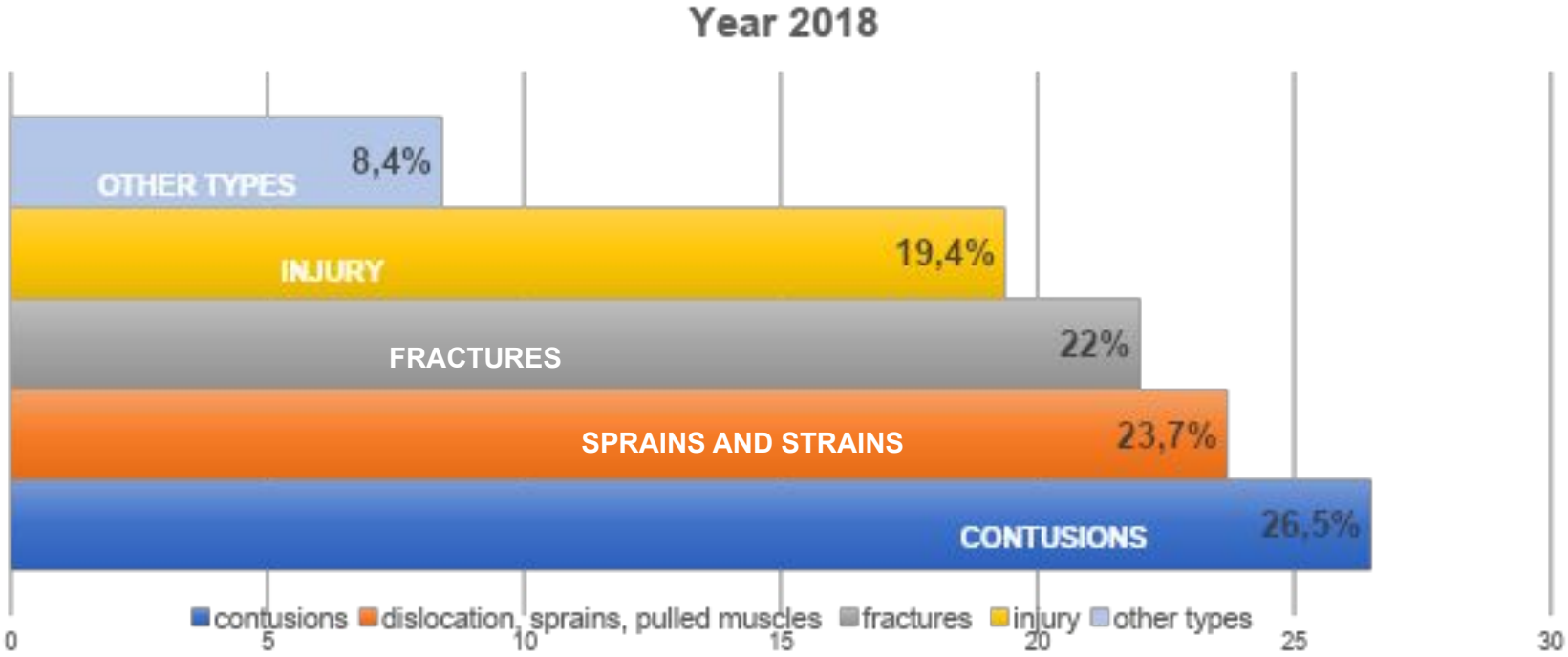
Number of work-related accidents (IT)



Downward trend between 2016 and 2018

Co-funded by the Erasmus+ Programme of the European Union

Types of injury (IT)



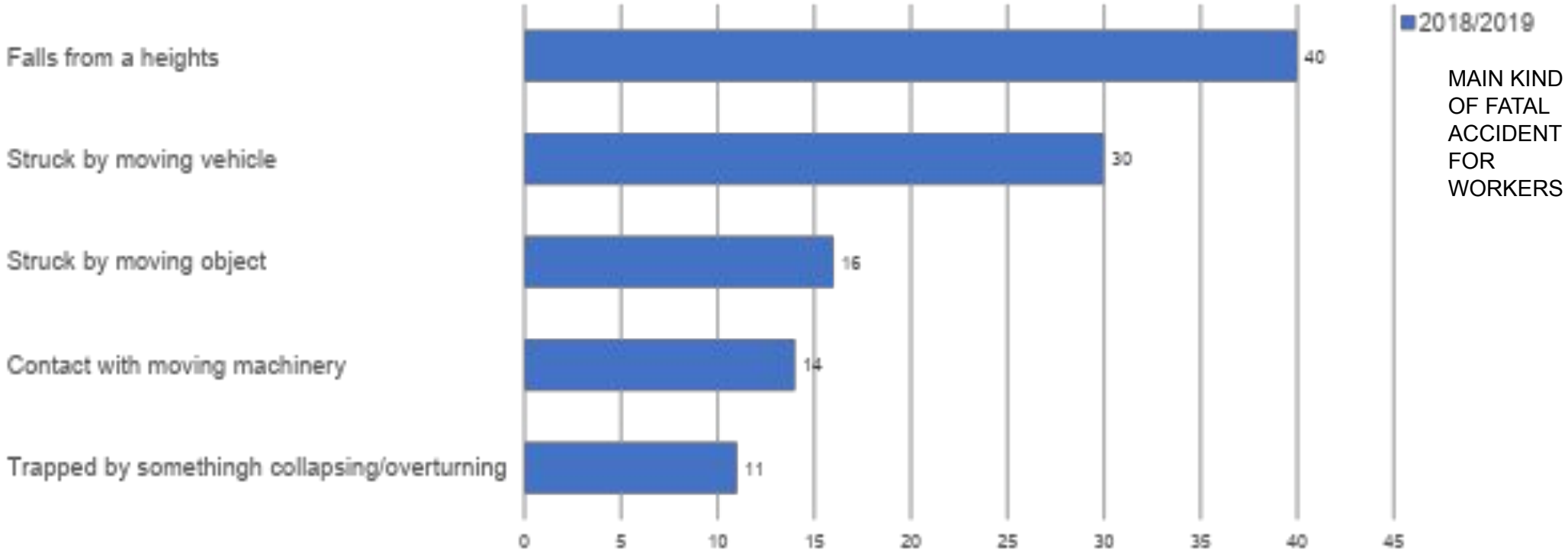
DATA SERIES 2018
Accidents in Constructions Sector

Banca Dati delle PROFESSIONI

Co-funded by the Erasmus+ Programme of the European Union

Types of fatal accidents in the workplace (UK)

Health & Safety Executive (HSE) Report 2019 and 2018



MAIN KIND OF FATAL ACCIDENT FOR WORKERS

Co-funded by the Erasmus+ Programme of the European Union

Rate of fatal injury per 100 000 workers, (UK)

Health & Safety Executive (HSE) (2018). Construction statistics in Great Britain, 2018. Annual Statistics Report by the Health & Safety Executive (HSE), 31st October 2018. Available to download from: http://www.hse.gov.uk/statistics/industry/construction.pdf

Co-funded by the Erasmus+ Programme of the European Union

How many fatal work-related accidents happened every day?

1 fatal accident every 4 days

Co-funded by the Erasmus+ Programme of the European Union

Number of work related accidents in Spain (2018)

73 *fatal* accidents / **year**

762 *serious* accidents / **year**

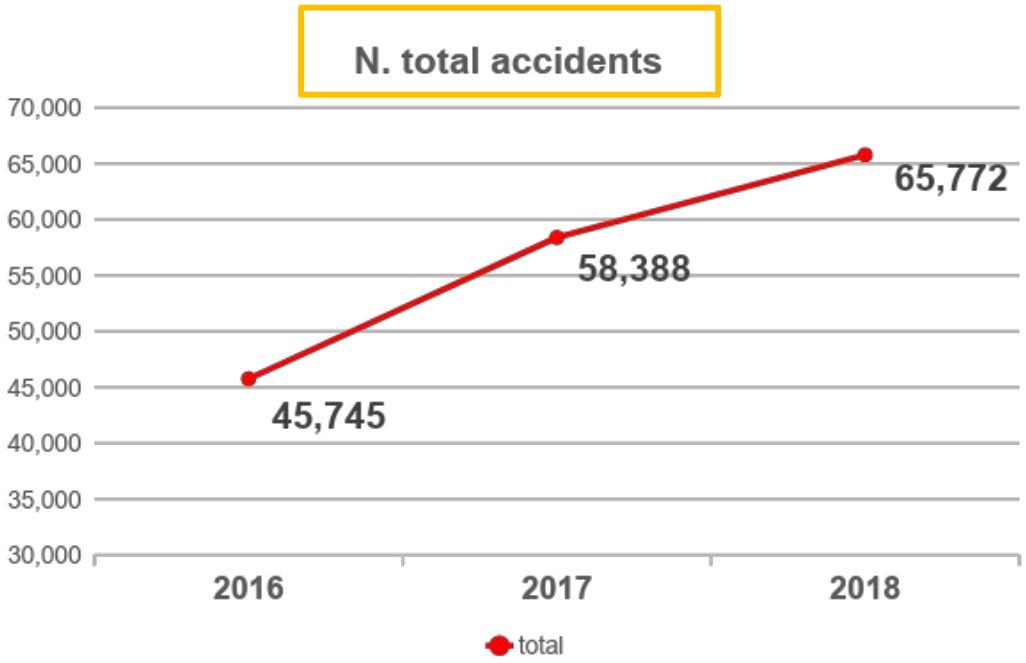
0.29 *fatal* accidents / **day**

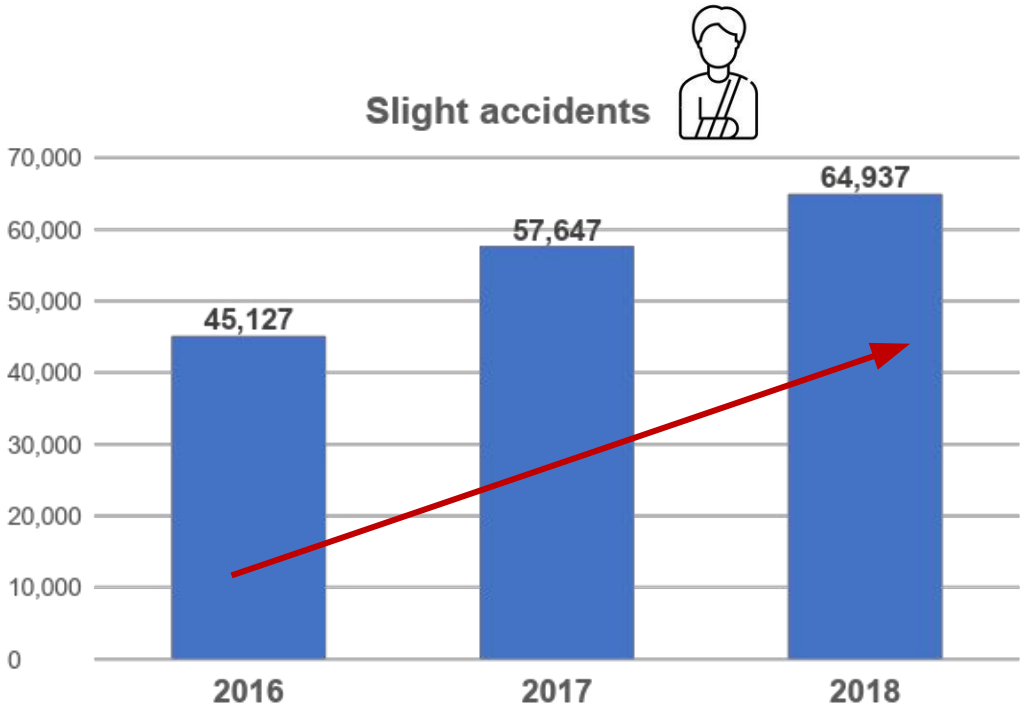
3.04 *serious* accidents / **day**

3.33 accidents (serious or fatal) / **day**

Co-funded by the Erasmus+ Programme of the European Union

Evolution of accidents in construction sector

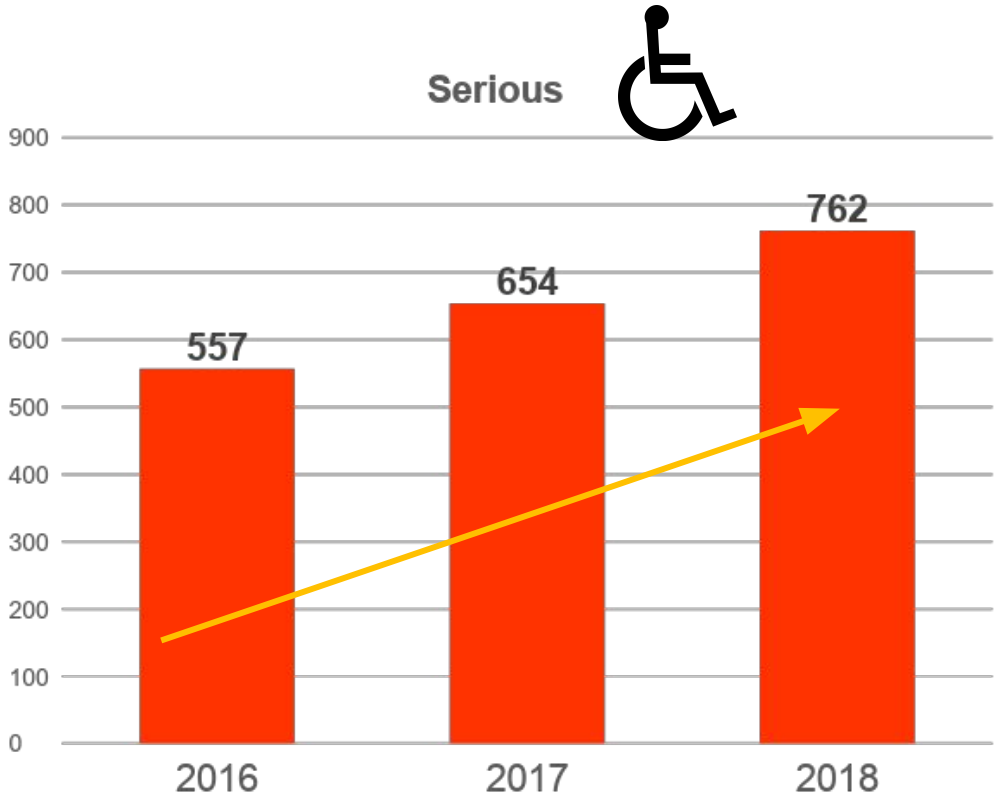


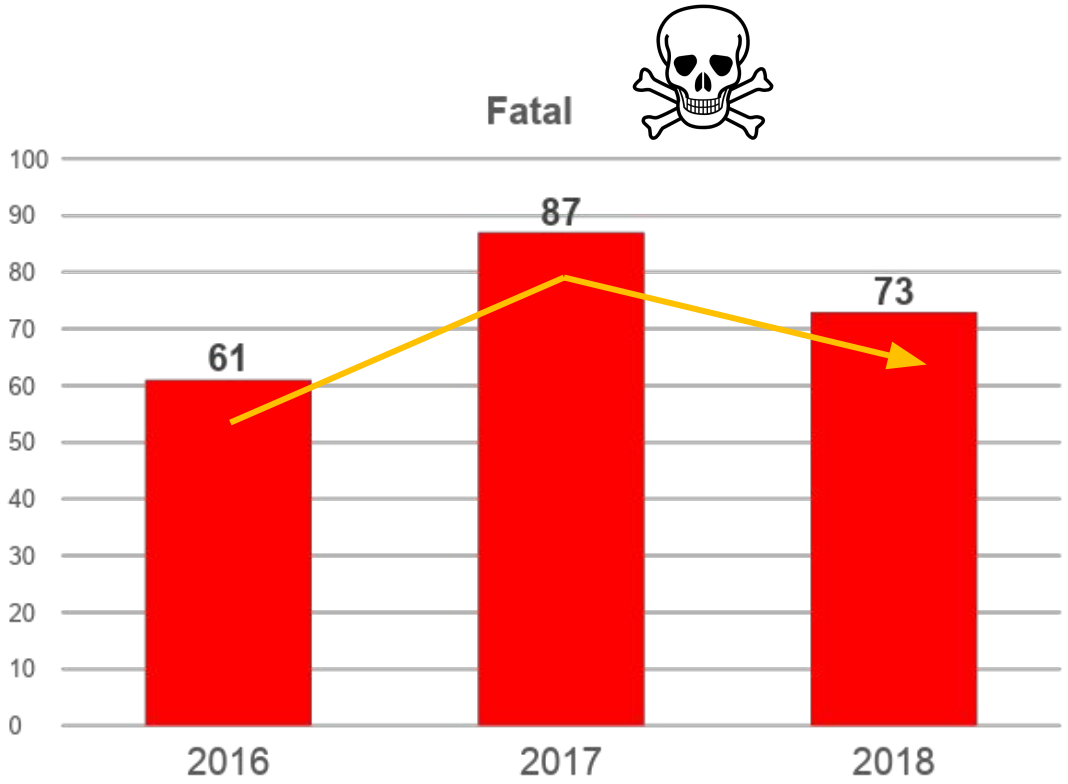


Source INSST - INe

Co-funded by the Erasmus+ Programme of the European Union

Evolution of accidents in construction sector



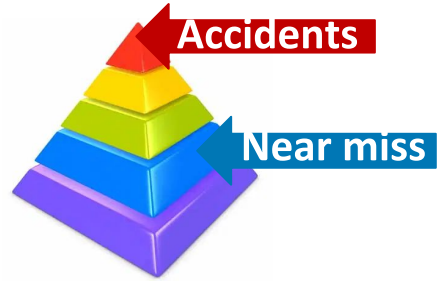


Source INSST - INe

Co-funded by the Erasmus+ Programme of the European Union

Accidents versus Near Misses

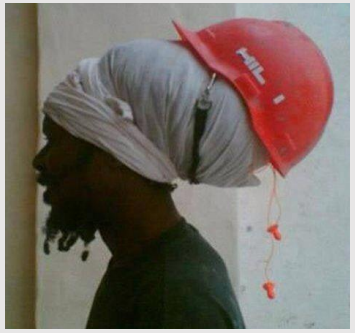
A near miss event is an accident that did not happen, but could have done.



It is important to consider near misses because they help us to prevent future accidents.

Co-funded by the Erasmus+ Programme of the European Union

Types of near miss accidents



Active errors that provoke immediate consequences *(e.g. Incorrect choice of protective equipment)*

Dormant errors or “silent” errors that are not noticed until they trigger an event (e.g. *making a hole in the pavement without reporting it or placing a border around it*)

Have you ever experienced similar situations?

Co-funded by the Erasmus+ Programme of the European Union

Participative activity

Let's analyse this situation.

- A potential accident depends on: The *worker's behaviour*?
- The *worker's characteristics?* (e.g. Inexperience on the job or a new job)
- *Communication* between a group of people (workers)?
- *Incorrect use of tools* and equipment?
- What could happen?
- What could be done to avoid creating a risky situation or an accident?

Co-funded by the Erasmus+ Programme of the European Union

Participative activity

GROUP EXERCISE

Form *groups of 4/5 people* and think about a case of a near miss accident you have personally experienced or that has happened to friends or colleagues and try to analyse the case according to the following questions:

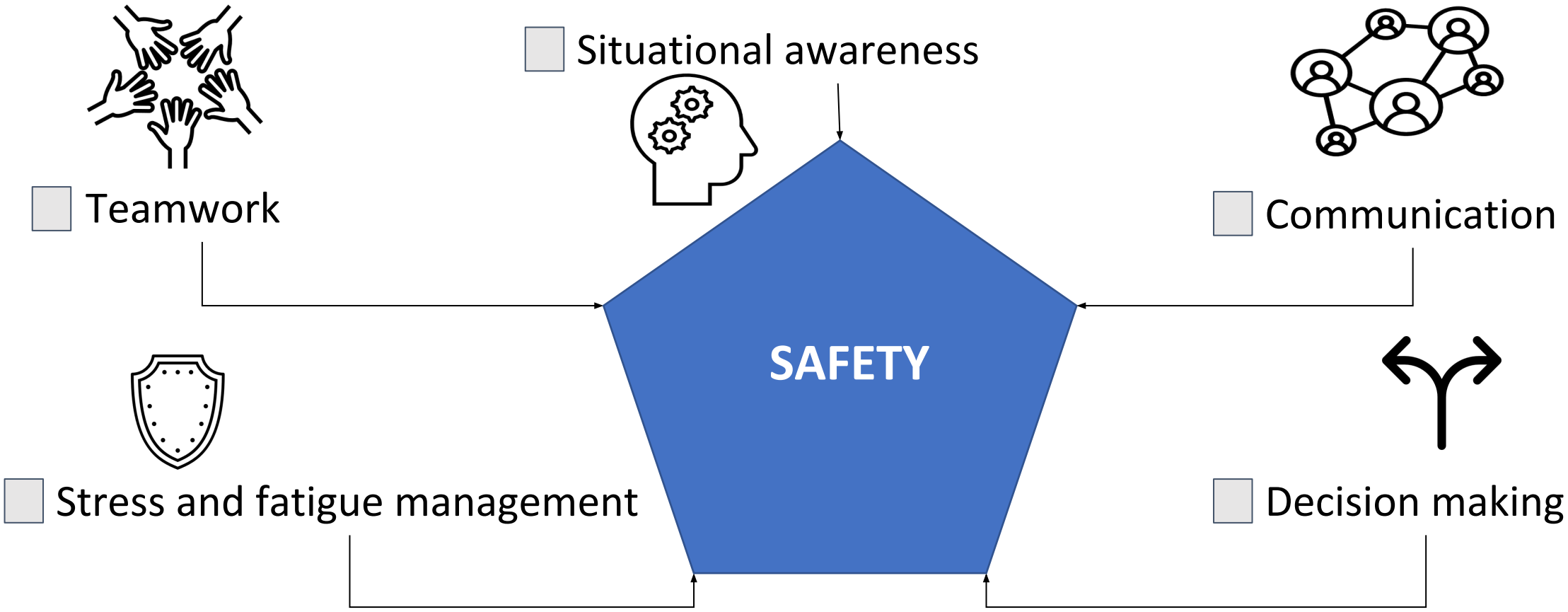
Co-funded by the Erasmus+ Programme of the European Union

Exercise. Question guidelines

- *What happened?*
- *When did it happen?*
- *The near miss accident depended on: someone's behaviour?*
- *The person's characteristics? (inexperience on the job or a new job)*
- *Lack of communication between a group of people?*
- *Incorrect use of tools and work equipment?*
- *What could have been done to avoid creating a possible accident situation?*

Co-funded by the Erasmus+ Programme of the European Union

What non-technical skills could be of use?



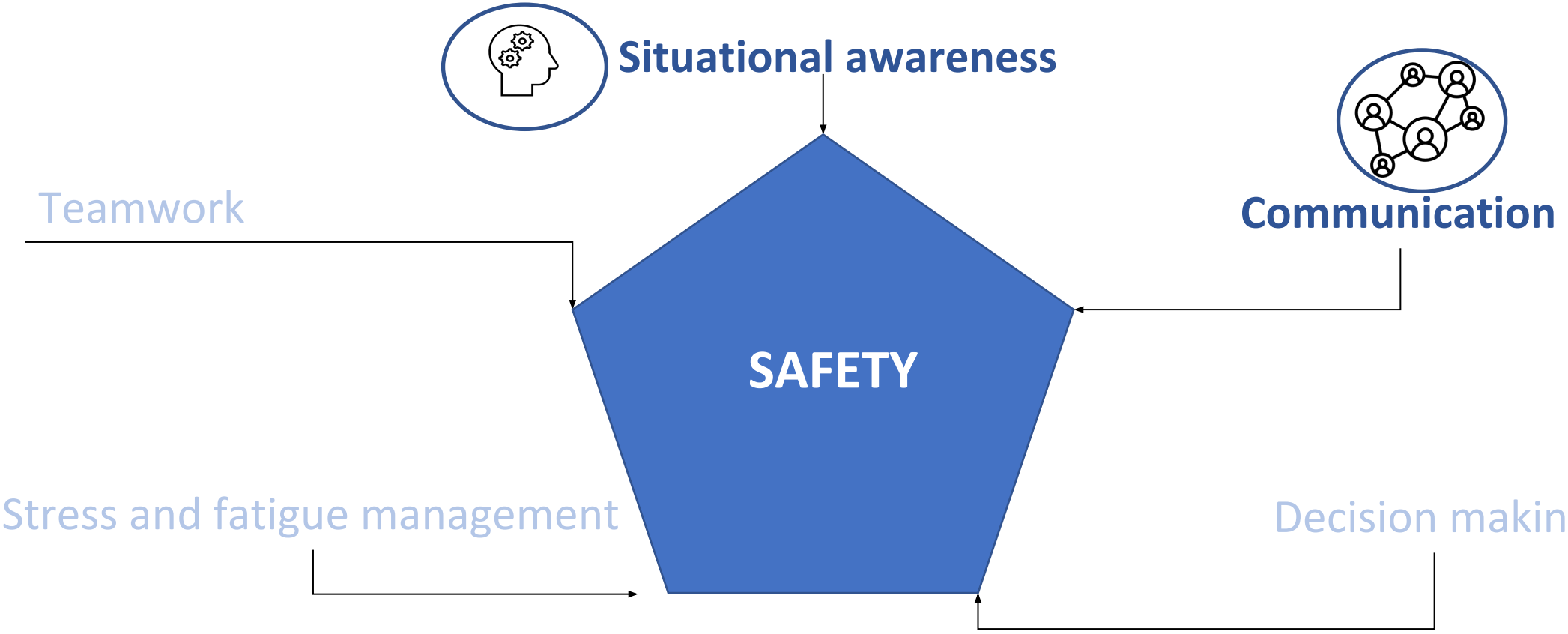
Co-funded by the Erasmus+ Programme of the European Union

Learning contents of this lesson

- The difference between technical and non-technical skills
- Near miss accidents

Co-funded by the Erasmus+ Programme of the European Union

Detailed NTS in this lesson



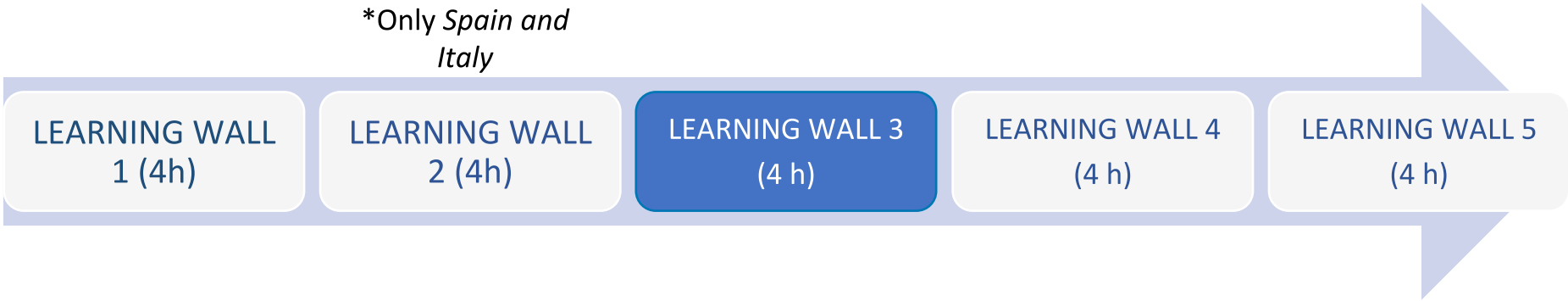
Co-funded by the Erasmus+ Programme of the European Union

Contents of the next lesson (only Spain and Italy)

- Basic concepts on safety in the work place
- Organization of prevention and risk evaluation
- Basics on hazards, signposting, protection devices, training obligations

Co-funded by the Erasmus+ Programme of the European Union

Contents of next lesson (United Kingdom)



- ✓ Mechanical, electrical, machinery and equipment hazard
- ✓ Hazard of falls from height and excavation explosions
- ✓ Physical hazard, noise, vibration in the work place
- ✓ Chemical hazard

Co-funded by the Erasmus+ Programme of the European Union

Keep in mind!

Next lesson we will focus on chemical risk.

Which chemical products do you use more during your work?

Next lesson, bring with you the product you use more. You will use it during a group exercise.

Co-funded by the Erasmus+ Programme of the European Union

ESTEEM

The University Of Sheffield.

VNIVERSITAT DE VALÈNCIA

Istituto Istruzione Professionale Lavoratori Edili di Bologna e provincia

valora prevención

Co-funded by the Erasmus+ Programme of the European Union

WALL 1 - Contents of the online platform

SLIDES

1 ACTIVITY

Co-funded by the
Erasmus+ Programme
of the European Union