



European Construction Sector Observatory

Policy fact sheet

Finland

Zero Accidents in the Construction Industry 2020

Thematic objective 2

September 2020



In a nutshell

Implementing body	Rakennusteollisuus RT ry (Confederation of Finnish Construction Industries, CFCI)
Key features & objectives	A strategy and action plan designed to encourage and help the 2,800 member companies of the CFCI and other construction sector companies to apply the 'Zero Accident' vision and approach in their organisations, and to work towards achieving zero accidents in the construction sector by 2020.
Implementation date	2010-2020
Targeted beneficiaries	Construction sector employers and employees
Targeted sub-sectors	All sub-sectors
Budget (EUR)	N/A
Good practice	★★★★☆
Transferability	★★★★☆

The construction industry is classified as the most hazardous industry in Finland¹. The sector recorded over 80 accidents per million working hours in 2005. By 2016, however, the accident rate had fallen by a quarter to 59.8 per million working hours². The number of fatalities in the Finnish construction sector has also fallen over the last two decades (by about two thirds)³. The introduction of occupational safety and health (OSH) improvements has been an important contributory factor.

The 'Zero Accidents' vision has gained traction in a number of countries over the last decade. Based on

the contention that all accidents are preventable, it puts forward an ambitious OSH strategy to prevent all accidents at work⁴. The Zero Accidents vision, which primarily focuses on safety aspects, assumes that people often tolerate accidents because they believe they cannot be prevented or that a certain number are inevitable⁵.

In 2010, the Confederation of Finnish Construction Industries (CFCI) launched a Zero Accidents in Construction initiative in Finland, based on the 'Construction industry statement: Aiming for zero accidents in the construction industry by 2020'.

The aim was to increase awareness of OSH issues and solutions across the sector, and to encourage CFCI's 2,800 member companies to adopt the recommendations of the Zero Accidents vision and strategy.

The Finnish strategy targets 'resilience' in particular, and emphasises the need for companies to predict and prevent threats.

According to a follow-up study conducted by the Finnish Institute of Occupational Health (FIOH), the accident rate across all construction sectors has decreased significantly. The accident rate has fallen by over 75% since 2005, from more than 80 accidents per million working hours to an average of 19.5 accidents per million working hours in 2019.

Although the initiative has not managed to achieve its end goal of zero accidents by 2020, it has demonstrated its potential to achieve that goal. This is supported by the fact that two thirds of the reduction in the accident rate was achieved between 2016 and 2019, providing evidence of the initiative's growing traction in the sector.

The Zero Accidents in Construction initiative has therefore been largely successful and could achieve better results with some improvements.

1.

General description

The Finnish Confederation of Construction Industry Companies and Associations (CFCI) – Rakennusteollisuus RT ry – is a representative voice for the construction sector in matters related to policy, legislation, business and industrial affairs, and the labour market. The goal of the CFCI is to promote good construction and make it easier for Finnish construction companies to do business and compete, both domestically and internationally⁶.

In 2010, the CFCI launched a ten-year initiative to eradicate all accidents at work in the construction sector by 2020. Based on their ‘Construction industry statement: Aiming for zero accidents in the construction industry by 2020’⁷, the CFCI pushed the ‘Zero Accidents’ Vision as a strategy for their member companies. It made clear that achieving the zero-accident goal required the commitment and cooperation of all stakeholders working in the construction industry.

All member companies were initially tasked with reducing their accident rate by 30% per year, with a view to reaching the achievable target of zero accidents by 2020.

The 2010 Statement was based on four key principles:

1. Investing in occupational safety is always worthwhile;
2. A skilled customer sets goals and creates the conditions for safety;
3. A ‘Safety starts with me’ attitude as a guideline for all;
4. Competence creates the foundation for safe work⁸.

The statement was updated in subsequent years of the initiative⁹ and the first principle was redefined as:

1. Safety is created by leadership

Based on the statement’s founding principles, the CFCI proposed key occupational safety and health (OSH) areas for development by all of its members. Members were required to implement an action plan and strive to achieve key objectives that included:

1. Providing updated and reliable information:
 - Regular occupational safety survey for those involved;
 - Participation in statutory accident insurance (TVL) groups;
2. Creating guidelines, recommendations and interventions:
 - Membership letters:
 - o Addressing occupational safety failures;
 - o Management presence on construction sites;
 - o Chin straps for helmets;
 - Regional State Administration Agencies’ (AVI) Coordination Group and Good Monitoring Practices;
 - Investigation of accidents at work – Fatal workplace accident investigation system (TOT), Ministry of Social Affairs and Health guidelines;
3. Launching thematic events:
 - Occupational Safety Week;
 - Regional and national occupational safety competitions;
 - Supporting RATUKE project seminars and activities¹⁰ – RATUKE is an occupational safety improvement project developed as a joint venture involving a wide range of construction sector stakeholders.

The RATUKE project is co-financed by the construction industry, the Construction Association, the Occupational Safety and Health Fund, and the Ministry of Social Affairs and Health. It also involves construction companies, insurance companies, training organisations, research institutes, NGOs and many other respondents to the challenge of

developing occupational safety. In line with the objectives of the Zero Accidents initiative, the RATUKE project aims to embed zero accidents thinking and practices as standard practice on construction sites and in the activities of all parties involved.

To improve construction safety, the RATUKE project aims to¹¹:

- Encourage all within the construction industry to make occupational safety tasks a natural part of everyday operations;
- Increase occupational safety knowledge, skills and co-operation across the sector;
- Establish a continuous development process to address occupational safety issues;
- Create a new kind of safety culture and safety management culture for the construction industry;
- Make the industry more attractive to young people and industry enablers;
- Rapidly reduce the number of accidents at work in the construction industry to avoid injuries to employees and associated costs to companies.

In parallel, the CFCI also gave a commitment to launch an additional set of complementary measures:

- Actively encourage CFCI member unions to join the Zero Accidents Forum¹²;
- Establish a separate high-level forum for construction industry stakeholders and societal

decision-makers to meet periodically with a view to collaboratively promoting occupational safety in the construction industry;

- Transform CFCI's Jokka magazine into a joint occupational safety publication for the entire federal community and to financially secure its continuation;
- Create an open website to promote the discovery of safety improvement information and provide open access to information on safety-related issues and statistics;
- Develop occupational safety competitions in each industry, and support and incentivise the uptake of good practices identified in those competitions.

The Zero Accidents initiative also invited companies to give a 'management-level commitment'¹³ to:

- Reduce accidents by 30% every year;
- Systematically improve occupational safety;
- Investigate all accidents and incidents;
- Use the necessary resources at their disposal to deal with occupational safety issues;
- Record and report accidents in accordance with common guidelines;
- Establish the Zero Accidents goals and requirements as standard practice in all contractual relationships.

Monitoring of the Zero Accidents initiative is performed by the CFCI Board, industry boards¹⁴ and the CFCI's Safety Group.

2.

Achieved or expected results

Work towards achieving zero accidents throughout the industry has been continuous and has produced very positive results¹⁵. Although some companies and construction sites have managed to demonstrate that accident-free operations are possible, there is still some way to go before the zero-accident goal is achieved in all CFCI member companies and the industry as a whole¹⁶.

By July 2014, the management teams of 494 CFCI member companies¹⁷ and 411 non-member companies¹⁸ had given a commitment to achieve the zero-accident goal. This indicates a significant level of commitment from construction sector companies.

The average accident rate reported by CFCI member companies was 19.5 accidents (per million working hours) in 2019. This rate is two thirds lower than the average recorded in 2016 for the construction industry as a whole (59.8 per million working hours) and just a quarter of the rate recorded in 2005 (80 per million working hours). This is an indication of the considerable impact that the initiative has had on participating companies¹⁹. It also indicates that there is still work to do to achieve the ultimate goal of zero accidents.

In 2020, the Finnish Institute of Occupational Health (FIOH) published a report²⁰ on the progress made in occupational safety in the construction sector. The report was commissioned by the CFCI, with the purpose of evaluating the 'Zero Accidents in the Construction Industry 2020' initiative.

The report confirms that over the last decade, construction safety has greatly improved. The number of accidents in relation to the number of hours worked has fallen significantly and is continuing to decline. In fact, the construction industry has been more successful in reducing its

accident rate than other hazardous industries, such as transport and storage or heavy industry.

In terms of accident rates, there were about 2,000 accidents at work in the accident insurance register data on the 147 companies that responded to the construction survey conducted by the CFCI, compared to a total of 13,975 accidents in the industry in 2013²¹.

Over the last decade, most serious accidents have been eliminated and the overall number of accidents has been reduced. However, the number of minor accidents has not significantly fallen. Temporary workers, in particular, continue to remain at a greater risk of injury, especially with regards to minor accidents.

The three key drivers of occupational safety in the construction sector, which are identified by the 'Zero accidents by 2020' initiative, are:

- 1) Cultural and attitudinal change required to embed occupational safety practices;
- 2) Increased use of personal and other forms of protective equipment;
- 3) Investment in occupational safety by construction companies.

The CFCI carried out a review of the implementation of the occupational safety statement in CFCI member companies, with the support of interviews. They concluded that good progress has been made in each of these areas over the last decade.

The assessment showed that occupational safety is a part of everyday activities at the best (Class A) construction sites and companies. At Class B construction sites and companies, occupational safety was maintained at the level required by law. The concern, however, is that there are still too many Class C companies, which are classified as those in which occupational safety is not yet a core function and/or where OSH skills are poor.

In the case of Class C companies, the main issues that are hindering them from implementing OSH improvements include a perceived lack of time to assess potential hazards in the workplace, a lack of urgency compared to others, and/or a perception that the occupational safety material provided by the CFCI is unnecessary²². Lack of awareness of the importance and value of OSH practices to both employers and employees would appear to be closely linked to the general attitude towards OSH practices in Class C companies.

The Zero Accidents initiative has provided easy-to-use tools to help companies to prevent accidents in the workplace and they are available for everyone to use²³. However, their adoption and implementation by new users is lower than expected. The users of these tools are mainly those companies that have already applied alternative observation procedures in the past²⁴. A reason for this may be the workload that the adoption of new tools may imply for smaller enterprises. In spite of this issue, 125 members of company management teams have given a commitment to use safety findings and incident reports²⁵.

Other achievements²⁶ include the hosting of seven editions of the Occupational Safety Week and the launch of several regional and national occupational safety competitions. In addition, the initiative has successfully implemented the RATUKE project, which has provided a series of annual seminars on occupational safety, and has produced and made available a wide range of informative support materials for the sector on its website (<http://ratuke.fi/>), including good practices, reports and guidelines.

The FIOH has also conducted interviews to discuss the development of the cornerstones of the initiative. Their purpose was to obtain first-hand

feedback from employees at all levels in CFCI member companies, including companies of different sizes (small, medium and large) and from different construction sub-sectors (building construction, infrastructure construction and construction product sectors).

Ensuring occupational safety in subcontractors is also one of the main challenges of the Zero Accidents 2020 initiative. Overall, improvements have been observed over the last decade, although involving subcontractors in safety practices is still viewed as a challenge. One of the reasons is that the working conditions in which small subcontractors often operate tend to be less controlled and monitored than is the case with larger enterprises.

Overall, the general consensus of the interviewees is that the use of protective equipment and changes in attitude towards safety are the two main improvements that have been achieved by the Zero Accidents initiative. In particular, they highlight the different mindset of younger workers, with greater consideration being given to safety. However, attitudes towards compulsory occupational safety training were diverse. Although supervisors and managers believe it to be important, the frequency of training sessions is an issue to some employees.

In terms of achieving zero accidents in the future, some interviewees believe that the current achievements would be difficult to improve, whereas others take the view that occupational safety will evolve and improve organically over time.

Looking forward, the CFCI's Construction Industry Safety Group intends to consider new steps and measures for the current decade because of the positive results of the initiative²⁷.

3.

Perspectives and lessons learned

Although the ultimate objective of zero accidents has not yet been achieved, the initiative has had a significant impact on all participating companies, helping them to greatly reduce their accident rates.

The initiative has demonstrated that it can significantly reduce accidents in companies and help make a shift in company culture at all levels towards greater safety in the workplace. However, some scepticism about the feasibility of the final goal of zero accidents and even about the importance of safety measures still exists, especially in terms of reducing minor accidents. Nonetheless, some CFCI member companies have demonstrated that achieving zero accidents is possible. The initiative has presented successful good practice examples to CFCI member companies to reinforce its strategy and messages and to show the way forward. This suggests that continued work in this direction has the potential to achieve the ultimate goal.

The involvement of managerial personnel in occupational safety improvement work is fundamental.

The importance of managerial commitment and involvement was identified in the 'Zero Accidents in the Construction Industry 2020' industry statement as a key success factor for the Zero Accidents initiative. The initiative achieved considerable success in gaining a commitment from large numbers of managerial teams and personnel to implement safety improvements and this helped to create a cascade effect within the companies involved. The fact that those companies have managed to reduce the number of accidents (per million working hours) by just over 75% since 2005 is evidence of the success achieved.

However, more work is needed to reduce the number further. In particular, there is a need to address the different views about safety that exist at different levels within some companies. These

were identified in interviews conducted to analyse the success of the initiative.

The creation of guidelines, recommendations and intervention logic is not a sufficient incentive on its own to encourage employers and employees to use them.

To make the Zero Accidents approach truly viable and achievable, a change in attitude across the sector must be accompanied by a change in daily working practices. Safety conscious attitudes and practices must become the norm in daily operations. All employees should recognise and value the advantages of operating safely and apply safety measures in their daily work. Their involvement should however go beyond mere application. To truly change the safety culture in an organisation, all employees should be encouraged to be proactive safety agents, applying and using relevant safety tools and measures, proposing changes where needed and encouraging others to do the same.

The ultimate goal of zero accidents in the workplace requires the involvement and collaboration of all construction sector stakeholders, both public and private.

The Finnish Institute of Occupational Health (FIOH), for example, has worked closely with the initiative as part of a joint effort to achieve a common goal. This collaboration has enabled the CFCI to gain access to more comprehensive information on the success of its initiative. The FIOH evaluation report, for example, includes a number of recommendations based on their detailed knowledge of occupational safety problems in the Finnish construction sector. They are valuable because they will inform current and future improvements to their safety strategies. The recommendations include anticipating the availability of qualified labour, reinforcing and facilitating communication, further developing

training schemes, making usage of ICT tools and improving personal protective equipment.

The involvement of policy-makers is also important to develop or amend official regulations and controls to support greater compliance with safety

requirements. For example, a legal requirement to use eye wear protection might help to reduce the occurrence of minor accidents²⁸.

4.

Conclusion and recommendations

The 'Zero Accidents in the Construction Industry 2020' initiative encompasses a wide range of industry-led activities designed to achieve the ultimate goal of zero accidents in the sector. Although the initiative has not managed to achieve its ambitious goal by 2020, its contribution cannot be ignored.

Over the last decade, it has successfully motivated and helped participating companies to reduce the average accident rate by a considerable margin, down by three quarters since 2005. In fact, the average accident rate has fallen by two thirds between 2016 and 2019, which suggests that the initiative is increasingly gaining traction in the sector. That is a very positive sign for continued and future OSH improvement work. The initiative set a very ambitious target that it has come close to achieving, at least in terms of those companies involved. It should therefore be considered to have been largely successful.

Looking forward, five recommendations are suggested to help to further improve the Zero Accidents initiative and help it to achieve its end goal. These could apply to either a continuation of the current initiative or similar measures in the future:

- Strengthen communication activities to make the initiative's messages more effective and to increase its reach throughout the sector. It is particularly important to target smaller companies in the sector, including subcontractors, to increase their awareness of OSH issues, and the value and benefits of improved safety, in terms of cost savings, greater productivity and better health;
- Consider the use of a more staged and tailored pathways towards zero accidents to provide companies of different sizes with a more structured set of phases to complete and

quantifiable objectives to achieve at each stage. The 30% annual accident reduction target may not, for example, be achievable for all companies. If also coupled with a view on the cost-benefit of each stage of achievement, this type of win-win approach may help to incentivise a larger number of companies, and smaller companies in particular, to join the initiative and invest in OSH improvements. It would also help to guide them through their improvement journey and keep them motivated;

- Consider the use of legislative measures and incentive schemes to help encourage companies that are more reluctant to adopt safety practices to get involved and take action;
- Scale up the initiative to achieve industry-wide impact, ensuring engagement with the widest possible number of stakeholders;
- Consider engaging with the education sector (secondary schools and higher education) to promote safe working in construction and to inform young people that may wish to join the sector about good practices and their benefits. This could enhance the appeal of the sector to new entrants and support the long-term sustainability of a zero-accident safety culture.

Overall, the Zero Accidents initiative is rated as a '4-star good practice measure' on a scale of 1 (low) to 5 (high).

This score is based largely on the fact that the ambitious goal of zero accidents was largely, but not completely, achieved in the expected timeframe (by 2020). The initiative succeeded in reducing the average number of accidents (per million working hours) reported by just over 75% since 2005 and by about 66% since 2016. There is therefore ample potential for this or a subsequent initiative to achieve a 5-star rating with the addition of some improvements. The fact that some CFCI member companies did achieve a zero-accident rate during

the initiative is evidence that the end goal is achievable.

The Zero Accidents initiative is rated as a '4-star transferable measure' on a scale of 1 (low) to 5 (high).

This score is based on a view that the initiative's industry-led approach is a highly practical approach that could be readily adapted and transferred to construction sectors in other countries. With the strategic lead of a key organisation in the sector, the initiative has demonstrated the value of engaging with a broad number of stakeholders within and associated with the sector, both public and private, and gaining their commitment to achieve a common set of goals.

Although principally targeted at CFCI member companies, it has also succeeded in attracting the participation of other companies from across the

sector. Countries with similar types of organisations to the CFCI in their domestic construction sector may find this approach quite useful. It provides a trial setting for a zero-accident approach that can later be scaled up if successful.

There is also scope to transfer elements of the initiative, such as the guidelines, recommendations and interventions developed, the good practices developed and demonstrated during the initiative, the types of thematic events hosted (e.g. Occupational Safety Week and safety competitions), and complementary initiatives such as the RATUKE project.

To conclude, with the addition of some improvements moving forward, there would be scope for this or a similar initiative to achieve a 5-star rating.

Endnotes

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