



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



GREEN RECONSTRUCTION OF UKRAINE THROUGH STANDARDS AND TECHNICAL REGULATION:

THE ROLE OF MUNICIPALITIES

24 January 2024



INTRODUCTION

Even before the outbreak of the armed conflict in 2022, Ukraine was facing various challenges, including outdated infrastructure, energy inefficiency, and environmental degradation. Now, the country has put forward a Recovery Vision that aims to capitalize on the reconstruction efforts and make sure that these are guided by and serve as a springboard for sustainability. So-called “Green reconstruction” presents an opportunity to enable a transition towards sustainable and inclusive growth in the post-conflict era. To achieve this, the adoption and effective implementation of appropriate standards is crucial.

UNIDO has joined forces with the Ministry of Economy of Ukraine, the National Standards Body (UAS) and international partners like CEN and CENELEC to conceptualize and develop a National Guiding Framework to lay the foundation for green reconstruction. As part of these efforts, a series of workshops have been organized to help explore how standards and conformity assessment can support the reconstruction of essential infrastructure, facilities, services and their management, through green lenses, particularly applying the principles of circular economy, climate neutrality and decarbonization, *inter alia*.

This series of workshops provides a platform for exchanging experiences and best practices and discussing the role of sustainability standards and technical regulations in support of green reconstruction. They bring together experts from relevant international, European and national partners and stakeholders from the public and private sectors to discuss the importance of integrating sustainability issues into Ukrainian public policies (including technical regulations) prior to the post-conflict reconstruction process.

This workshop represents the fifth out of the series of events on this topic, as per the below plan:

- Role of standards in promoting and facilitating green reconstruction (**13 June 2023**)
- Role of public procurement in promoting sustainability (**25 July 2023**)
- Specific standards for green reconstruction (**8 September 2023**)
- Implications for the national Conformity Assessment system (**28 September 2023**)
- Special session: Standards and technical regulation: the role of municipalities (**24 January 2024**)

With the participation of over 160 national and international experts, from governments, international organizations, municipalities associations, representatives of territorial communities and the private sector.

SPEAKERS

OPENING

Mr. Steffen Kaeser

Chief, Division of SME Competitiveness,
Quality and Job Creation,
UNIDO



Ms. Olena Voskobiynyk

Director of Department of Technical Regulations in
Building Ministry for Communities, Territories and
Infrastructure Development of Ukraine



Mr. Benjamin de Ville de Goyet

Project Manager, Standards Development
Department (Energy & Living), CEN-CENELEC



Moderator:

Ms. Rita Bratash

National Expert on Green Recovery
UNIDO



PANEL

Mr. Nigel Croft

**Senior Expert on Quality
Infrastructure, UNIDO**
*UNIDO framework on Green
Reconstruction of Ukraine*



Mr. Michael Hamalij

Senior Expert on Municipalities, UNIDO
UNIDO work stream on Municipalities



Mr. Benjamin de Ville de Goyet

**Project Manager, Standards Development
Department (Energy & Living), CEN-CENELEC**
*The importance of EU standards to support
municipalities green reconstruction*



Ms. Oksana Kysil

**National expert to Ukraine of EU
project “Covenant of Mayors East”**
*Green and resilience reconstruction:
opportunities and challenges for municipalities*



Mr. Fulco Treffers

Director, Rožkvit Urban Coalition for Ukraine
*Building greener and smarter: supporting
municipalities through urban design projects*



Mr. Oleh Harnyk

**Expert on Public Services,
Association of Ukrainian Cities**

*The role of municipalities on the Green
Reconstruction of Ukraine: challenges
and opportunities*



Ms. Oksana Kyryliuk

Executive Director, Association of Towns of Ukraine

*Tools to support the recovery and development
of Ukrainian municipalities*



Mr. Denys Pavlovskyi

Senior Asbestos Management Expert, UNDP

*Asbestos-free reconstruction of Ukraine:
The Role of Municipalities and EU Standards*



Mr. Eberhardt Kettlitz

**Coordinator of Municipal Development
Policy, Municipality of Gudensberg**

*The co-operation between the twin towns
of Gudensberg and Shchyrets in the energy
refurbishment of the hospital in Shchyrets*



INSIGHTS FROM THE SPEAKERS

OPENING REMARKS

This webinar garnered a positive response, as evidenced by the high turnout of participants, totaling 170. This workshop was attended by representatives of ministries of Ukraine, experts in the field of standardization of relevant sectors of the economy, state enterprises, business, associations, scientific institutions, territorial communities and district administrations.

National and international experts discussed common challenges that municipalities face, as well as best experience and practices on aspects related to green reconstruction, including environmental issues, safety issues, reconstruction and eco-design of territorial regions and communities, and much more.

Ukraine—and municipalities in particular face many problems that could be overcome through close collaboration with national and international partners. This workshop served as a starting point to build trust and involve municipalities in the development process of the Guiding framework that is being developed through a consultative process, and ultimately directed to support a wide range of national actors—including municipalities—in the green reconstruction of Ukraine.



Mr. Steffen Kaeser

**Chief, Division of SME Competitiveness,
Quality and Job Creation, UNIDO**

- UNIDO has joined forces with the Ministry of Economy of Ukraine, the National Standards Body and CEN and CENELEC and many other national and international partners to conceptualize and develop a National Guiding Framework of Standards and Technical Regulations for the Green Reconstruction of Ukraine.
- The role and importance of municipalities are extensive, and are particularly relevant in the reconstruction process. As a result, we have expanded our approach to encompass the local level and leverage the important role of municipalities. In fact, we will strongly focus on supporting municipalities to assure that capacities and skills to rebuild greener through standards and technical regulations are granted capillary to a wide range of actors involved in this ambitious plan: from bigger cities to smaller villages.

"This workshop represents a platform for the exchange of experiences and best practices to shape such path, particularly capitalizing on experts' experiences to identify ways to fast-track the development and implementation of a National Guiding Framework for Standards and Technical Regulations for a green reconstruction of Ukraine."

Ms. Olena Voskobiynyk

**Director of Department of Technical
Regulations in Building, Ministry for
Communities, Territories and Infrastructure
Development of Ukraine**

- The Ministry for Communities, Territories and Infrastructure Development of Ukraine is responsible for reconstruction-related issues and the implementation of technical regulations in the field of construction, which is the key to the effective reconstruction of Ukraine.
- Several normative construction norms have been approved and a practical guide developed on how to use these norms in practice. Construction products must comply with technical regulations. This is necessary and it is a guarantee of the quality of the object under construction.

"Ukraine is proud for its result of adopting more than 20,000 CEN-CENELEC standards and aims at continuing this harmonization effort in the construction sector. As of January 2024, 100 standards had already been submitted for approval."



Mr. Benjamin de Ville de Goyet

Project Manager, Standards Development Department (Energy & Living), CEN-CENELEC

- CEN-CENELEC works hard to develop standards that support innovation and reflect the modern world. Jointly with UNIDO, we are actively cooperating to support Ukraine in its recovery, where the participation of municipalities is extremely important!
- We are deeply convinced of the unparalleled capacity of standards to address the most pressing global challenges and opportunities, foremost amongst them being climate change and the digital transition. We are delighted to work with UAS, and other like-minded stakeholders worldwide, committed to promoting international standardization as a tool to support trade, sustainability, and innovation.
- UAS has been a close member of our family for many years, having full and direct access to CEN and CENELEC standards for review or for adoption. Through this strong cooperation framework, UAS also has sent observers to contribute to the work of CEN and CENELEC technical committees.

- In January 2023, UAS became an “Affiliate” in CEN and CENELEC: the most advanced type of our international cooperation frameworks. Through this Affiliate status, we aim at preparing UAS to become a full member of CEN and CENELEC. As a result of the cooperation, Ukraine received the status of an affiliated member and adopted 20,000 standards as a package.

“CEN-CENELEC is actively and effectively cooperating with the UAS, and we hope our fruitful cooperation will continue and lead to Ukraine becoming a full member of the CEN-CENELEC family.”



PANEL DISCUSSION

Mr. Nigel Croft

Senior Expert on Quality Infrastructure, UNIDO

*UNIDO framework on Green Reconstruction
of Ukraine*

- UNIDO's goal is to support Ukraine in establishing a nationwide framework of guidelines and technical regulations that will facilitate the implementation of environmentally friendly reconstruction in critical sectors such as housing, energy efficiency, and transportation, and municipalities are expected to play a key role in these efforts.
- To properly promote a green reconstruction, it is important to consider regional and local capabilities to ensure compliance with relevant regulations and standards. It is imperative to involve national stakeholders, including local construction organizations, and local materials producers.
- Municipalities play a crucial role in promoting green principles in the reconstruction process. For instance, they can assure a proper deployment of regulations, ensuring that the agreed-upon terms in tenders are enforced.



Mr. Michael Hamalij

Senior Expert on Municipalities, UNIDO
UNIDO work stream on Municipalities

- Partnership among municipalities is a unique modality to transfer know-how, mobilize international support, attract resources, and foster solidarity.
- Successful economic development is only possible with the involvement of the municipalities. Through twinning programmes, and other similar partnership initiatives, it is possible to successfully promote technology transfer, which would ultimately create employment and development of local entrepreneurship. The know-how transfer will improve the reintegration into professional activities and better local services.
- UNIDO recognizes the important role of municipalities in the reconstruction context and adopted a “local approach” to assure their involvement and to successfully communicate with them and with relevant local stakeholders. Through a network of regional national coordinators, UNIDO assures a capillary reach of all actors, to provide all municipalities—from smaller to bigger cities—the possibility to benefit from its technical support.
- Since December 2023, UNIDO identified and engaged eleven Regional Development Coordinators (RDCs). RDCs build up a local network, connecting authorities, chambers of commerce, NGOs, business associations, cluster, SMEs, other development projects and organizations. They also identify twinning opportunities between Ukrainian and European municipalities.

“Through clusters and twinning programmes, municipalities can support each other in promoting a green reconstruction of the country. UNIDO stands ready to support this effort, which will be also beneficial to Ukraine’s alignment to the EU market.”

Mr. Benjamin de Ville de Goyet

Project Manager, Standards Development Department (Energy & Living), CEN-CENELEC
The importance of EU standards to support municipalities’ green reconstruction

- Standards can bring advantages to both businesses and consumers, as they are market-driven. Supporting standards can reduce risks for businesses, manufacturers, and consumers, while also potentially lowering costs. Furthermore, the application of standards can improve safety and product quality, and foster innovation among partners.
- The European model for standards (“Single Model of Standards”) has been successfully implemented in the European Union and can be very useful for Ukraine, particularly in light of its EU accession aspiration. This system is known to build trust between users, companies, manufacturers and authorities. It is worth noting that the standards are developed through a transparent and inclusive process that allows stakeholders—including consumer organizations—to follow the development step by step.
- The European Commission could potentially contribute to the development of these crucial standards through a transparent system that enhances trust in the standards and guarantees that they embody the best practices within each sector.

Ms. Oksana Kysil

National expert to Ukraine of EU project “Covenant of Mayors East”

Green and resilience reconstruction: opportunities and challenges for municipalities

- Covenant of Mayors East (CoM East) is the EU-funded project aimed at introducing the EU climate and energy initiative to the Eastern Partnership countries. CoM East supports local authorities in implementing sustainable energy policies, improving the security of energy supply, and facilities their contribution to climate change mitigation and adaptation.
- Green and resilient reconstruction efforts must be planned strategically to cover all relevant sectors and actors involved in the process. A strategic vision and long-term strategy are core requirements to start any recovery activities. Harmonization is required of national, regional and local documents and coordination mechanisms on national, regional and local levels within different types of sectors.
- Local institutional capacity must be strengthened before reconstruction begins. Indeed, many failures could have been avoided by having the necessary urban planning, administrative, and governance structures organized during the earliest years.

● Green and resilient reconstruction must be accompanied by economic growth. Sustaining returnees depends upon accessible jobs and economic growth. Policies should streamline business legislation and make starting an enterprise as easy as possible.

● To grant green reconstruction, a governmental coordination of key national and regional stakeholders would be essential, including involving donors, IFIs, private business, municipalities and NGOs. It is important for local and regional authorities to have equal access to green finance, through various financing mechanisms and schemes for the different sectors.

“Green and resilient reconstruction must be recognized as an ecosystem. Functional reconstruction of merely physical aspects is insufficient to recreate vibrant cities. Policymakers should seek to also use educational, economic, and cultural initiatives to rekindle urban life.”



Mr. Fulco Treffers

Director, Ro3kvit Urban coalition for Ukraine
Building greener and smarter: supporting municipalities through urban design projects

- Ro3kvit Urban Coalition for Ukraine was founded in 2022 in response to the massive destruction caused by Russian military aggression. Our big goal is to improve the quality of life in Ukraine with means of sustainable, inclusive and green urban planning. We realize this by conducting research, providing education to municipalities and implementing pilot projects and city strategies.
- One of the Ro3kvit's pilots is «Dnipro River Integrated Vision», a project in cooperation with Greenpeace. The team analyses all aspects of the river through research and data collection: from economic to ecological, from safety to recreation, to provide practical recommendations to the city council for the city's sustainable future. The goal is to define the strategy about identity, memory, and future, a vision on new residential areas, a new post-industrial economy, new functional zoning plan and a clear vision on ecology and nature.
- We are currently working—and have already worked in the past—on many other urban and rural strategy projects, in Beryslav, Ochakiv, Zaporizhia, Bohdanivka regions, including new green concepts and visions.

"While working more closely with municipalities around Ukraine, we identified several topics that they feel a necessity for. Those include the need for capacity building and a professional network of specialists in municipalities, as well as budgets for investments from donors. In Ro3kvit, we try to support this process and help municipalities plan sustainably for their future."

Mr. Oleh Harnyk

**Expert on Public Services,
Association of Ukrainian Cities**
The role of municipalities on the green reconstruction of Ukraine: challenges and opportunities

- National regulations must be developed and implemented at regional and municipal levels. When developing construction projects, it is important to consider the practices of European countries.
- Among the main challenges that municipalities face is the lack of necessary resources to manage the waste of war. As a matter of fact, the Ministry of Environment reports that military operations since the beginning of the full-scale invasion in early November 2023 have generated over 1.5 million tonnes of demolition waste. However, only 144 tonnes have been moved to demolition waste disposal sites.
- Additionally, challenges relate also to the damage to natural resources. Analysis shows that approximately 60% of forests and 70% of water bodies in the affected regions have been damaged. Similarly, mined areas also present a significant problem: currently, there are 174,000 square kilometres of mined areas, which require substantial financial and human resources and place a major burden on municipalities.

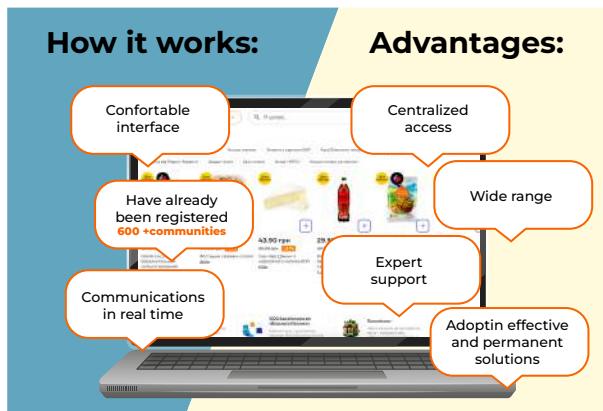
"Our current focus to promote green reconstruction is on critical infrastructure, such as energy infrastructure, housing, and communal services."

Ms. Oksana Kyryliuk

Executive Director,
Association of Towns of Ukraine

Tools to support the recovery and
development of Ukrainian municipalities

- Among the main challenges municipalities face during the green reconstruction process are: financial challenges, lack of technical knowledge and expertise, local social impact, legal restrictions, infrastructure restoration and availability of local resources. There are different tools to support the recovery and development of Ukrainian municipalities.



- The “Supermarket Solution” is a digital tool that provides access to solutions and services for the reconstruction and development of communities, a permanent cycle of communication between all participants in the process—local self-government, national government, donors and business.
- The Association of Small Towns of Ukraine, through its European Office, offers support to communities. This is realized particularly by sharing the European experience, best practices, and innovative solutions. It also offers consultancy and trainings for environmental experts.

Mr. Denys Pavlovskyi

Senior Asbestos Management Expert, UNDP

Asbestos-free reconstruction of Ukraine:

The Role of Municipalities and EU Standards

- Most of the reconstruction efforts of Ukraine will be carried out at the local level. Among the main challenges will be waste management related to the demolition of debris after missile attacks. As a matter of fact, piles have a large amount of asbestos-containing substances, which are dangerous for human health.
- Municipalities are responsible for ensuring that all work on the demolition of rubble is carried out in accordance with European norms and standards, because the safety of workers working on rubble is under their area of control and responsibility.
- Municipalities must ensure and control the use of personal protective equipment by workers working on rubble and at risk of contact with asbestos-containing materials, and all this must comply with European norms and standards and ensure the safety of workers' lives.
- The World Health Organization (WHO) announced that annually more than 100,000 people die from exposure to harmful asbestos fibers, and about 125 million people in the world are exposed to asbestos at the workplace. All varieties of asbestos, including chrysotile, are carcinogenic to a person.

“There is no safe use of asbestos, just as there is no acceptable safe exposure limit.”

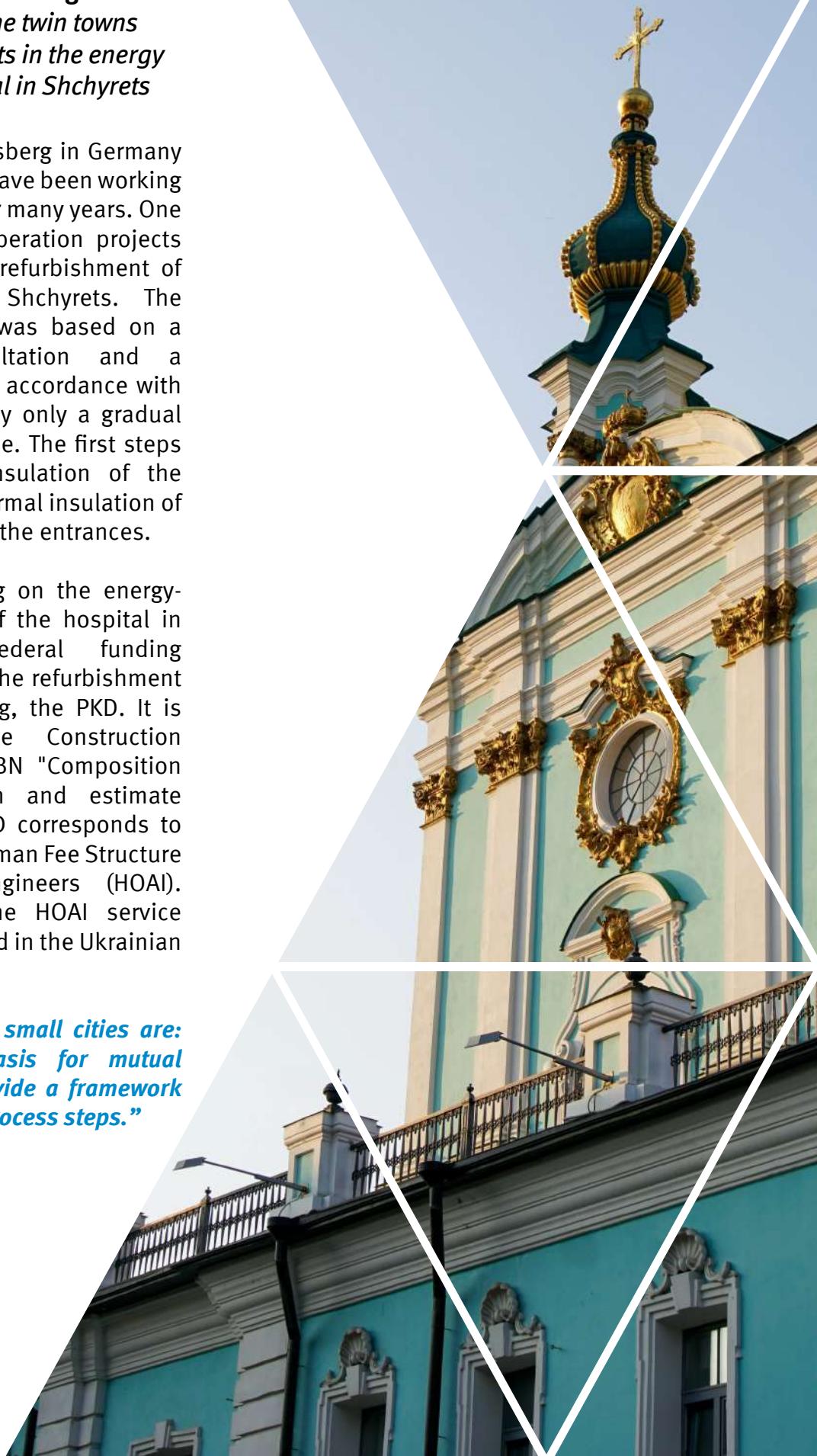
Mr. Eberhardt Kettlitz

Coordinator of Municipal Development Policy, Municipality of Gudensberg

The co-operation between the twin towns of Gudensberg and Shchyrets in the energy refurbishment of the hospital in Shchyrets

- The twin towns of Gudensberg in Germany and Shchyrez in Ukraine have been working together in many areas for many years. One of the development cooperation projects was the energy-efficient refurbishment of the large lyceum in Shchyrets. The refurbishment roadmap was based on a German energy consultation and a Ukrainian energy audit in accordance with ISO 50001, but financially only a gradual improvement was possible. The first steps were the repair and insulation of the heating pipes and the thermal insulation of the top storey ceiling and the entrances.
- We are currently working on the energy-efficient refurbishment of the hospital in Shchyrez with a federal funding programme. The start of the refurbishment is the execution planning, the PKD. It is subject to the State Construction Standards of Ukraine DBN "Composition and content of design and estimate documentation". The PKD corresponds to service phase 5 of the German Fee Structure for Architects and Engineers (HOAI). Procedures, such as the HOAI service phases, are also described in the Ukrainian construction standards.

"Our experiences of two small cities are: Standards form the basis for mutual understanding. They provide a framework for planning and define process steps."





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