



US – UA Working Group Yearly Summit XI: Providing Ukraine with an Annual Report Card Amidst War Year Two – June 14th, 2023

Responsible Market Economics

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REUNITE

REbuilding Ukraine's National Independence Through Education





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Sound Fiscal & Monetary Policy

Proper Business Transparency / Anticorruption Mechanisms

Plans for Post War Reconstruction



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Sound Fiscal & Monetary Policy

Central to the reconstruction effort and the funding to support it will be an understanding of the prevailing monetary and fiscal policy.

We at RUAI are now beginning to do a needs assessment for our <u>REUNITE</u> education program. Knowing what the funding policies are going to be will determine many of the certification programs, courses and management systems that need to be established.



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Proper Business Transparency / Anticorruption Mechanisms

- Legal Process. (Contract law)
- Business licensing. (Federal / State (Oblast) / City / Municipal
- Site planning and permitting. (Highly political and time consuming)
- Bonding and Surety.
- Open transparent, best practices, competitive bidding process.
- Project management systems must have checks and balances in place to assure what is requested to be paid for has been built as designed and specified.
- Corruption is crime this must be addressed by the legal and criminal law system, and impartially enforced.



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Plans for Post War Reconstruction

It took the Eastern European countries of the former Soviet Bloc – over 10 years to fully integrate EU and Western Standards into their country's academic institutions, government ministries / agencies and industries.

Ukraine must do it faster!!



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Plans for Post War Reconstruction



Where are we now and where are we going



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Plans for Post War Reconstruction



WHAT, WHO, HOW, WHERE & WHEN?

attainable phases...a massive effort in those 5 questions, which must be divided into



CUSUF

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WHAT needs to happen now?

Strengthen Human Capital thru Education and Training

- Plan and educate the workforce.
- Identify and Evaluate damaged/destroyed Transportation, Communication Structures, and Infrastructure.
- Identify and Evaluate existing workforce and building materials.
- Increase numbers of highly qualified Ukrainian planning, architectural, engineering, construction management and craft professionals enabled to ensure utilization of leading-edge technologies and materials.
- Develop capacity in environmental sustainability and resiliency under the European Union guidelines.

ACADEMIA PUBLIC SECTOR PRIVATE SECTOR



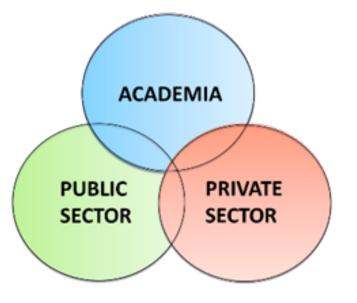
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WHO?

4 Sectors needed to interact

- Academia
- Government. National, Oblast or Regional, City, Local
- Local Industry
- Supplemental Transportation, Engineering, and Telecommunications Consultancies from the West





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HOW?

- 1. Targeted Funding
- 2. Overall Phased Time-Action Plan focused on EU Integration
- 3. Specific Strategies for attracting and retaining women, veterans, and displaced refugees. (700,000 Returning Soldiers / 300,000 Support Staff)
- 4. Comprehensive improvement of design, construction, & planning industries through:
 - University-level degree programs
 - Professional development programs
 - Craft skills and technical training
 - Community outreach and engagement activities



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WHERE?

- Decision on geographic locations including EU and USA
- Critical infrastructure Rail, Airports, Shipping Ports, Telecommunications Main Switch and Wireless Communications Structures
- Construction of Housing, Hospitals, Schools pending decisions on prioritization
- Online
- Ukrainian University and Industry Partner Locations
- Identified priority locations in Ukraine by local stakeholders.

UKRAINIANS MUST DECIDE



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WHEN?

- Now!!
- Need Task Force
- Planning and Education
- "Need Infrastructure in place to Build Infrastructure and Housing"
- Technology must be in place
- Put certified programs together



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WHEN? Four phase approach over four years





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Three-legged stool of Post-War Ukraine

WHAT

Infrastructure including Transportation, Communications, Construction

- Up to \$1 trillion over 10 years
- Green
- Sustainable
- PROJECT TRANSPARENCY

WHO

Educational/Vocational Training

- New design/construction technologies
- Job creation to attract6 million refugees home
- Training for 700,000+ demobilized soldiers & 50,000+ downsized government workers

HOW

Economic Development

- EU Membership Process
- "Fortress Ukraine"
- Agriculture & IT Legacies
- Modernized economy/ Secure democracy is in the interests of the US and the EU



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Construction Industry Challenges



80%

overruns in capital expenditure



20%

longer to complete averaging 20 months overschedule



29%

Lag in productivity of gross value added per hour worked

Large projects across asset classes typically take <u>20 percent longer</u> to finish than scheduled and are up to <u>80 percent over budget</u>.¹ Construction <u>productivity has actually declined</u> in some markets since the 1990's; financial returns for contractors are often relatively low and volatile.²

¹ Global Projects Database, IHS Herold, Nov 19, 2013, herold.com; McKinsey analysis

² US Bureau of Economic Affairs; US Bureau of Labor Statistics; WIOD; World Bank; GGCD-10; national statistical agencies of Turkey, Malaysia, and Singapore; OECD, Rosstat, McKinsey Global Institute analysis



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The Future of Digital Project Delivery

6

Scalable

Ы

5

Lifecycle Approach

Bridge the gap between design and construction like no one else

Open Standards & Interoperability Format agnostic platform and systems

Office to/from Field Connectivity

Strong office to field workflows built for IoT & construction hardware

Single Source of Truth

Single source of truth for a shared understanding of scope and decisions



3



all stakeholders

Integrated workflows across phases with

Improved communication and collaboration for all parties

Data-Driven

Metrics and KPIs used for better decision making

Right-sized deployment of technology

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Digital Construction

TRANSPARENCY

One Single source of truth

Built around a structured database federating all stakeholders inputs for each project phase, tracking design variation, physical progress and enabling the handover of a Digital Avatar of the project

VISIBILITY



Graphical display of Comprehensive data

Reducing the overall lifecycle costs, the amount of deviation between design and construction, empowering the decision making though a data driven process

PREDICTABILITY



Integrated database crossing parametric design, embedded planning and budget information

Enabling to anticipate upcoming events

CONTROL



A confident delivery process empowered by Trimble solutions



5 The Stand



Special Thank You to all for their efforts in preparation of this presentation

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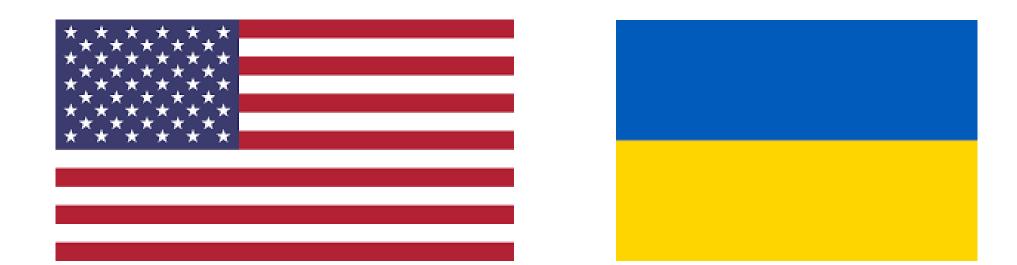
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Standing With Ukraine