INFOBOX

IMPLEMENTATION OVERVIEW OF TEMPUS PROGRAMME PROJECTS: OVER 20 YEARS IN UKRAINE 1993–2014

FINDINGS AND RECOMMENDATIONS

NATIONAL TEMPUS/ ERASMUS+ OFFICE IN UKRAINE

Kyiv, Ukraine
2015

OVERVIEW
OF TEMPUS PROGRAMME PROJECTS:
OVER 20 YEARS IN UKRAINE
1993–2014

Tempus logos

TEMPUS-UKRAINE@20
1993–2014

Видання здійснено в рамках проекту Європейського Союзу
«Національний Темпус/Еразмус+ офіс в Україні»,
що реалізується ГО «Інститут лідерства, інновацій та розвитку» за кошти ЄС.
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TEMPUS-UKRAINE@20
1993–2014

Ukraine began to participate in the calls for proposals within the framework of the European Union's Tempus Programme on **29 April 1993** when the second stage of the Programme activities for 1994–1998 was approved. In addition, Ukraine was granted an opportunity of taking part in two calls for proposals on preliminary project preparation (pre-JEPs) in 1993 and 1994 for humanities and social sciences, including history and law, political sciences and economics, modern European languages, and improvement of university governance. Ukrainian universities received 12 and 10 projects, respectively, under which they started active preparation for their participation in the Tempus II calls for proposals and won the first **four** projects.

As part of Tempus Programme, *more than 300 projects* have been financed in Ukraine between 1994 and 2014, including about *192* Joint Projects, *47* Structural Measures, and about *100* Individual Mobility Grants. More than *89 million Euro* funds invested by EU to Ukraine for 20 years of Tempus Programme implementation in Ukraine.

Since 1993 when Tempus began its history in Ukraine, *the Delegation of the European Union to Ukraine* has been coordinating the Programme; in particular, it performed the functions of the National Tempus-office in Ukraine until 2009. The EU Delegation to Ukraine organises activities to support and promote Tempus and other educational programmes funded from the EU budget, coordinates matching of national priorities for annual calls for proposals and competitive selection of project applications, initiates the state registration procedure for projects, etc.

The Education, Audiovisual and Culture Executive Agency has been coordinating implementation of Tempus Programme since 2009 pursuant to the European Commission's mandate. It provides consultations, trainings and monitors the projects implementation.

The Ministry of Education and Science of Ukraine has been the principal beneficiary of Tempus Programme for 20 years, actively participating in partnerships on *72* Tempus Programme projects, including *33* Structural Measures. The Ministry's role is especially important for implementation of project outcomes at the national level. Its public servants take part in project information and communication activities, ensure updating of standards for curricula created as part of Tempus projects, act as consultants and experts in the formulation of recommendations and other documents on state policy development as well as in improvement of the regulatory legal framework.

Projects under **Tempus II (**1994–1998**)** were designed to develop curricula for the Master's degree courses in economics, econometrics, banking, environment and natural resource economics, clinical psychology, European studies, social sciences, improvement of modern language skills.

Tempus II Programme was pioneered in 1994 by Ukraine's *four* leading higher educational institutions: *Taras Shevchenko National University of Kyiv* (translator skills improvement), *National Technical University of Ukraine «Kyiv Polytechnic Institute»* (university autonomy project), *Oles Honchar Dnipropetrovsk National University* (economic curriculum upgrading project), and *National University of «Kyiv-Mohyla Academy»* (project on establishing social work and social policy as higher education disciplines – at the picture the first graduates of Master degree at School of Social Studies in 1997, p. 4).

Further on, new Ukrainian partner universities were joining Tempus II. In the framework of projects implementation, the higher educational institutions focused first of all on *modernizing*

curricula in the following areas: *Agricultural and Food Economics, European Economic Studies, Ecology, Energy and Environment Protection, Environmental Sciences and Clinical Engineering, Industrial Systems, Personnel Management in Industry, Economic Law, European Maritime Law, Social Work and Social Policy, Social Sciences, Publishing.*

Besides, the Tempus II projects were devoted to the implementation of European approaches to training of *statisticians* and *interpreters* and to Master's degree researches, as well as creation of an *information analysis computer system for university management.* In particular, a EU-Ukraine coordinating centre to strengthen international university cooperation was established, then renamed as the ***Fundraising Group*** and successfully functioning in the *National Technical University «Kharkiv Polytechnic Institute» for over 20 years*; a centre for innovative education technologies was founded in the *Lviv Polytechnic National University.* The latter subsequently turned into a ***Laboratory of innovative teaching technologies*** that carries out innovative activities in the field of modern teaching technologies and secures maintenance of the university's virtual learning environment. The Centre for European and International (Economic) Studies, established in *Ternopil National Economic University* in 1999–2001, became a ground for creating the ***EU Information Centre*** in the university in 2007.

Tempus II Programme was gaining its recognition in Ukraine, involving an increasingly greater number of higher education institutions. In particular, as of 1999, already *31 higher education institutions* were taking part in project implementation. They included I.I. Mechnykov Odesa National University, National Technical University «Kharkiv Polytechnic Institute», Taurida

National V.I. Vernadsky University, Ivan Franko National University of Lviv, Kharkiv National University of Radioelectronics, Kyiv National University of Construction and Architecture, Zhytomyr State Technological University, National University of Life and Environmental Sciences of Ukraine, etc.

Tempus III Programme (2000–2006) introduced new priorities and new subject areas. Ukraine's participation in Tempus III coincided with its accession to the Bologna Process and joining the European Higher Education Area, which was accordingly reflected in the focus of projects in Ukraine: priority areas, in addition to economics and business management, included *Agriculture, Information and Communication Technologies*, and *Environment.*

In the subsequent years, *51 higher education institutions* were involved in Tempus III. They included 'novices' such as V.N. Karazin Kharkiv National University, Odesa National Polytechnic University,

Zaporizhzhia National Technical University, Donetsk National Technical University, Volodymyr Dal East Ukrainian National University, Crimean Humanitarian University (Yalta), National University of Ostroh Academy, M.P. Drahomanov National Pedagogical University, National Academy of Public Administration, the President of Ukraine, Zhukovsky National Aerospace University «Kharkiv Aviation Institute», National Aviation University, National Metallurgical Academy of Ukraine, O. Bohomolets National
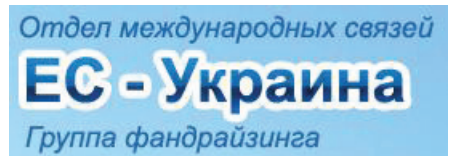
Medical University, National Transport University, Ivano-Frankivsk National Technical University of Oil and Gas, and others.

Within the framework of Tempus III, more than *100 projects* were implemented in Ukraine, including about *80* Joint Projects and *29* Structural and Complementary Measures that involved over *80* Ukrainian higher education institutions.

Among the ***Structural Measure Projects*** involving the *Ministry of Education and Science of Ukraine*, a system of quality assurance in universities was developed and a quality assurance curriculum was designed based on the *Donetsk National University's* centre as a national provider of quality assurance training. Within the framework of project activities, relevant documentation was developed for higher education institutions ranking using information technologies based on an ontological approach; recommendations were formulated for development of student self-governance based on a European model; *recommendations were prepared for the implementation of the European Credit Transfer and Accumulation System* (ECTS). As a result, proposals for national procedure of higher education quality assurance have been developed according to the Bologna Process recommendations. *Recommendations have been elaborated for implementation of licensing and accreditation procedures* based on European standards. An *all-Ukrainian network of regional advisory units on ECTS* implementation has been established on the basis of 10 higher education institutions: *National Aviation University, Oles Honchar Dnipropetrovsk National University, Institute of Business and Modern Technologies (Zhytomyr), Ivano-Frankivsk National Technical University of Oil and Gas, National Agrarian University, National Technical University «Kharkiv Polytechnic Institute», Zaporizhzhia National University, Taurida National V.I. Vernadsky University, A.S. Popov Odesa National Academy of Telecommunications, Vinnytsia National Technical University*.

Hence, *every higher education institution in Ukraine appointed a **ECTS coordinator*** – an authorised person responsible for ECTS implementation, counselling, etc.

Joint Projects under Tempus III Programme focused on ***development and modernisation of curricula*** on Bachelor, Master and PhD levels in the following areas:

- Food Chain Management;
- Veterinary Medicine;
- Environment Protection;
- Environmental Management and Engineering;
- European Studies and International Relations;
- International Finance;
- International Law;
- International Economic Law;
- European Law;
- Organisation and Personnel Management;
- IT-Based Crisis Analysis and Decision-Making (project event is at the picture);

- Applied Economics;
- Economics;
- Business Administration in Information Technology;
- International Tourism Economics;
- Aircraft Engines and Power Systems;
- Aircraft Manufacturing Technologies;
- Geographic Information Systems in Agrarian Universities;
- Metallurgy in the European Integration Context;
- Software Engineering;
- Computer Systems and Networks;
- Computer-Based Industrial Design (Including Establishment of Cad Laboratories);
- Business Administration in Agriculture.

TRAST – **TRUE ASSESSMENT**
Distance Learning Network for Teachers

In 2004–2007 the Distance Learning Network for Teachers for competence assessment was created with participation of National Academy of Educational Sciences of Ukraine, National Academy of Public Administration under the President of Ukraine, Association of School Heads of Ukraine, Testing Board of Ministry of Healthcare of Ukraine in cooperation with Universities from Italy and Great Britain (at the picture – project team).

An important component of project activities within the Tempus III stage consisted of strengthening relationship between *higher education and society*. Implementation of such projects resulted in the following:

▪ implementation of skills improvement *courses on transport logistics* and on *agrarian policy and administration*; for public servants on *environment protection* and *ecological safety* on the regional level, on *IT,* in the field of *land resources management*, a distance training programme on *European integration* for public servants; retraining on *transboundary water resources management* at the *National University of Water Transport and Nature Management*; *IT courses for school teachers* in the *National University of «Kyiv-Mohyla Academy»;*

▪ institutional development of special *pedagogy for persons with mental disorders*, in particular establishment of a *professional association* based on *M.P. Drahomanov National Pedagogical University;*

▪ establishment of *innovational units*:

– a training and counselling *centre* for professional development of agrarian managers at *Bila Tserkva National Agrarian University;*

– a training *centre* to ensure management training based on adapted EU standards and practices at *Kharkiv National Academy of Municipal Economy*;

– a media resource *centre* to provide practice-oriented courses corresponding to the European standards of new media training and digital technology at *Zaporizhzhia National University*;

– a training *centre* for maritime transport managers at *Odessa National Maritime University*;

– a Ukrainian training *centre* for special-purpose aviation and for staff training according to international standards at the *National Aviation University;*

– a *centre* of higher education for people with disabilities at the *Crimean University of Humanities (project event is at the picture)*;

– a training *centre* for actuaries and financial analysts for development of a national system of actuaries training, retraining and advanced training according to the EU professional standards at *Taras Shevchenko National University of Kyiv*;

– a training resource *centre* of critical computing at *Zhukovsky National Aerospace University «Kharkiv Aviation Institute»*;

– a career and employability *centre* at the *National Metallurgical Academy of Ukraine, Dnipropertovsk (*project event is at the picture, p. 7);

▪ development of an open *virtual law library* and a *law consultancy centre* at the Yaroslav the Wise National Law University, *Kharkiv* – further developed, an automated library complex became an information library portal; an *e-library* is under formation as an innovative component of the university's virtual information environment; a law consultancy area developed into a structural unit, established in 2007 – the *Law Clinic* of the University – that includes about 100 adviser students;

▪ implementation of information technologies (IT) in the library of the *National Technical University of Ukraine «Kyiv Polytechnic Institute»* had been further developed: wireless Internet and a local computer network are in operation, an *e-catalogue* was created, an ***e-library*** was under developing (in particular, almost *100* methodological titles had been digitised); establishment of an ***e-library*** as a media resource centre at the *National University of «Kyiv-Mohyla Academy»* and with the participation of the *National University of Ostroh Academy* launched development of an electronic component of the library collection (more than 300 thousand electronic titles) that was fully represented in the ***e-catalogue,*** and its electronic part was placed on the library's website.

Governance reform in higher education is a key component of the higher education system modernisation as a whole, therefore results of projects aimed at governance reform are important, including:

▪ establishment of the *system of student leaders* training to develop student self-governance based on *Bohdan Khmelnytskyi Cherkasy National University*, *Vinnytsia National Technical University*, and *Kyiv International University*;

▪ creation of a *national network of educational institutions in the field of Social Work* (five HEIs) as well as *university networks* on *energy*, *statistics*, and *know-how transfer*;

▪ systemic *modernisation of HEI governance* based on *information flow analysis* using IT in *Oles Honchar Dnipropetrovsk National University*;

▪ establishment of *test laboratories* to introduce best IT use practices in HEI governance based on *Kherson State University, Kherson National Technical University, V.N. Karazin Kharkiv National University, and Zaporizhizhia National University*;

▪ elaboration and implementation of the *mechanisms* of cooperation and interaction between universities and employers, a *model* of cooperation between universities and industry, and a *strategy* for introduction of entrepreneurship in aviation engineering at universities;

▪ establishment of a *technology transfer and knowledge management centre* at the *National Technical University of Ukraine «Kyiv Polytechnic Institute»* to provide information support, career development and training for target groups;

▪ development of *distance education* based on e-learning platforms;

▪ *establishment of the branch* of *Zhukovsky National Aerospace University «Kharkiv Aviation Institute» Aircraft-Building Department* on the basis of Antonov State Company;

▪ implementation of courses for *improving research, scientific and communicative competencies* of Master and PhD students at agrarian universities, and securing their recognition by the Ministry of Education and Science of Ukraine; development of a *concept* for training of agrarian science specialists;

▪ implementation of new approaches to assess the quality of students' achievements.

Priorities of the *six* calls for proposals under **Tempus IV** Programme (2007–2013) are aimed at the following:

▪ curricula reform in view of implementation of a three-cycle structure of higher education according to ECTS and recognition of qualifications;

▪ development of the following areas: pedagogy, machine-building and technologies, law, education, materials science, social sciences, natural sciences, agriculture, environment, tourism and services, urban and regional planning;

▪ university governance and student service; implementation of quality assurance mechanisms; institutional and financial autonomy; equal and transparent access to higher education; development of international relations,

▪ as well as in the area «Higher Education and Society»: development of university-business partnership, equal access to higher education, trainings for civil servants, the knowledge triangle (education- research-innovations), qualification frameworks.

Inernational Conference «Tempus & Erasmus Mundus Opportunities for the Eastern Partnership» was performed in 2011 where representatives of higher education institutions from EU Member States and Easten Partnership Region had possibility to learn projects experience, create partnerships and practice how to write successful project proposals. The European Commissioner for Education, Culture, Multilingualism and Youth, Ambassador of European Union to Ukraine, representatives of the Directorate-Generals of European Commission, Education Audiovisual and Culture Executive Agency, National Authorities, Higher Education Institutions, Civil Society Organizations from Eastern Partnership Countries participated actively in the event (at the picture above).

Over the period of Tempus IV stage, another *41 higher educational institutions*, taking part in the Programme for the *first time*, have joined the project partnerships. They include Berdyansk State Pedagogical University, Chernihiv State Institute of Economics and Management, Dniprodzerzhinsk Sate Technical University, Dnipropetrovsk National Railway Transport University, Kryvyj Rig National University, Kyiv Hetman Petro Konashevych-Sagaydachnyi State Maritime Academy, Lutsk National Technical University, Mykolayiv National University, National Mining Academy (Dnipropetrovsk), Perejaslav-Khmelnytsky State Pedagogical University named after Gryhoriy Skovoroda, Sevastopol National University of Nuclear Energy and Industry, Yurii Fedkovych Chernivtsi National University, Volodymyr Hnatiuk National Pedagogical University, etc.

Based on results of *six* Tempus IV calls for proposals involving Ukrainian partners, the EU has financed *94 projects:* 12 projects in the 1st call (*overall* consolidated budget being about EUR 11 mln.), 12 in the 2nd (about EUR 11 mln.), 5 in the 3rd (about EUR 5 m), 9 in the 4th (about EUR 9 mln.), 23 in the 5th (about EUR 22 mln.) and 33 in six call (around EUR 32 mln.). A strong impulse enhancing interest to the Programme and, accordingly, resulting in a growing number of project applications was provided by considerable increase in financing for the Tempus IV projects in 2011 and 2013 for Azerbaijan, Belarus, Armenia, Georgia, Moldova and Ukraine within the Eastern Partnership policy framework. The Tempus IV projects in Ukraine include 76 *Joint Projects* (including 12 national ones) and 18 *Structural Measures* (including 6 national ones).

The **National Tempus-office in Ukraine** has begun its operations since 2009, being responsible for efficient implementation of Tempus Programme in Ukraine in cooperation with the Education, Audiovisual and Culture Executive Agency, the Delegation of the European Union to Ukraine, the Ministry of Education and Science of Ukraine, and the European Commission's Directorate-General for Education and Culture. The National Tempus-office in Ukraine coordinates activities of higher education institutions for implementation of Tempus projects as well as cooperates with other stakeholders involved in the higher education reform in Ukraine, promotion and introduction of the Bologna process (at the picture is an opening ceremony at InfoDay).

In the priod of 2009–2014 the series of National and International events for promotion of EU-funded Programmes in higher education, project proposals writing and partnerships creation to participate in Tempus, Erasmus Mundus, Jean Monnet and Epasmus+; workshops for project teams winners on projects implementation specific and other events were performed, the projects data-base and useful materials for potential participants prepared by the National Tempus-office team.

Supported by the Ministry of Education and Science of Ukraine, the *National Team of Higher Education Reform Experts* has started its work – European Commission initiative with the purpose to provide a pool of expertise in certain areas to promote and enhance progress toward the Lisbon and Bologna objectives in the light of national needs and aspirations. The National Teams reinforce the international nature of the Lisbon and Bologna agenda and their external dimension. The Ukrainian team of experts has been performing a number of seminars/workshops on the Bologna Instruments implementation and other. Since 2011–2014, the HERE team sessions during InfoDays, International Conferences on Bologna Process and series of Workshops for ECTS Coordinators had become traditional.

NTO Representatives together with National experts team took part in development of *National Qualifications Framework* (2011) in line with European Qualifications Framework for Life Long Learning and contributed to the work on new *Law of Ukraine "On Higher Education"* (2014) in the contexts of principles and guides of European Higher Education Area and Bologna Process tools.

In 2009–2010, *three Structural Measures* Projects implemented with compulsory involvement of the *Ministry of Education and Science of Ukraine* as a partner of Tempus IV projects had achieved certain results, particularly:

▪ regulatory *documents*, *recommendations* and *operating procedures* on the use of *policies* and *tools for quality assurance* at higher education institutions were developed and under implementation according to the European Network for Quality Assurance (ENQA) documents: *National Technical University of Ukraine «Kyiv Polytechnic Institute», Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», Sevastopol National University of Nuclear Energy and Industry;*

▪ *methodological recommendations* for educational approach modernisation and social partnership improvement to strengthen competitiveness of *specialists in Humanities* were developed. Materials served to update the educational standard for the *Culture Management* specialty (0201 Culture Subject Area): *Taurida National V.I. Vernadsky University, Volodymyr Dal East Ukrainian National University, Taras Shevchenko National University of Kyiv (project event is at the picture below);*

▪ provisions of the *public policy on e-internationalisation* were developed according to the European internationalisation strategy and the lifelong learning principle to improve academic mobility. The *open platform «E-Learning Int. Clearing house» had been created for international team project activities* and an *e-bank* of training courses was established with participation from *National*

Technical University «Kharkiv Polytechnic Institute», Kharkiv University of Humanities «People's Ukrainian Academy», Taurida National V.I. Vernadsky University, Ivano-Frankivsk National Technical University of Oil and Gas.

Based on implementation results of Tempus IV *Joint Projects (2008–2013)* in Ukraine, the goals set for thematic priorities had been achieved.

Curricula reform priority:

▪ *a three-cycle* (Master and Doctoral (PhD) levels) system in *Social Work* in higher education was implemented,

and the *international journal on applied social sciences «Social Work and Social Policy in Transition»* was established at *the National University of «Kyiv-Mohyla Academy»;*

▪ *a new Master programme* in the specialty *«Educational Measurements»* had been designed and implemented, in particular, an *educational sectoral standard*, at *Drahomanov National Pedagogical University, courses* on Educational Measurements are proposed at *Nizhyn Mykola Gogol State University, Kirovohrad Volodymyr Vynnychenko State Pedagogical University;*

▪ in the field of *Education Management, competence centres of excellence* was established at *Oles Honchar Dnipropetrovsk National University* and *Khmelnytskyi National University (project event is at the picture);*

▪ *Master program courses* on *foodstuff expertise and quality control* were developed and implemented on base of European standards at *Kharkiv State Zooveterenary Academy, Dnipropetrovsk State Agrarian University, Kherson State Agrarian University, Odessa State Environmental University* with support of Ministry of Agrarian Policy of Ukraine and Ukrainian Corporation of the Industrial Meat Production;

▪ *Master programmes* were modernised on *safeware engineering* (*safety product design*) and a *National network of training and consultancy centres for engineering innovations* had been established at *Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», Odessa National Polytechnic University, Sevastopol National Technical University, Yuri Kondratyuk Poltava National Technical University, Khmelnytsky National University* and Institute of Mathematical Machines and Systems, National Academy of Sciences of Ukraine, Polysvit Design Bureau, Radiy Research Production Company;

▪ *Master programmes* on *land resource management* had been modernised at *Kyiv National University of Construction and Architecture, Lviv National Agrarian University, Kharkiv National Agrarian University, Donetsk National Technical University* with the participation Lviv Research Institute of Land Management (project event is at the picture below);

▪ *Western-Eastern Educational Teachers* Network was created on the bases of Universities in Belgium, Lithuania, Moldova, Portugal, Romania, Sweden and Ukraine *(Natonal Technical University «Kharkiv Polytechnic Institute»);*

▪ *Master programmes* were modernised on *International and Comparative Intellectual Property Law* and a *consulting e-centre on intellectual property management* has been established at *National Yaroslav The Wise Law University, Kharkiv, Khmelnytsky National University, Zhukovskyi National Aerospace University «Kharkiv Aviation Institute»;*

▪ *study programmes* in geodesy and cartography were modernised using *geographical information systems* (GIS) and geographical information technologies at *Lviv Polytechnic National University* and *Kyiv National University of Construction and Architecture;*

▪ development of a *PhD programme in Renewable Energy and Environmental Technology* and of a *web-based joint platform* as an innovative multi-disciplinary learning environment for research education at *National Technical University of Ukraine «Kyiv Polytechnic Institute»* and *National University of Water Management and Nature Resources Use* with participation of European Energy Company;

▪ *qualification requirements structure for Meteorology* was developed, curricula of *environmental BSc* had been revised and upgraded, *Joint MSc and PhD programs in Environmental Governance* were established at *Odessa State Environmental University* and *Kharkiv National Academy of Municipal Economy* with participation of Institute of Carpathian Ecology;

▪ updated Master curricula in *Engineering* was introduced, and a *network of ELM (Engineers in Labour Market) offices* was established at *Pryazovskyi State Technical University, Zaporizhzhia National Technical University, Lutsk National Technical University (project event is at the picture)*;

▪ *curricula* were modernized based on a practice-oriented approach and international experience via *distance learning in Tourism* – at *Donetsk National Technical University, Volodymyr Dahl East-Ukrainian National University*; in the field of *Environment* at agrarian universities – *National University of Life and Environmental Sciences of Ukraine* and *Lviv National Agrarian University* with support of Ministry of Education and Sciences of Ukraine; in the field of *Environmental Management* – at *V.N. Karazin Kharkiv National University* and *Taurida National V.I. Vernadsky University*; in *Space Technologies* – at *Oles Honchar Dnipropetrovsk National University, Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», National Technical University of Ukraine Kyiv Polytechnic Institute* and **computer classes** and training **laboratories of micro-satellites** were established;

▪ general professional BSc and MSc courses on *enterprise management* and *institution administration* with *double degrees* (*Ukraine and France*) had been introduced and taught at *Kyiv National University of Trade and Economics, Donetsk National University of Economy and Trade named after M. Tugan-Baranovsky, Mariupol State Humanitarian University, Poltava University of Economics and Trade, Lviv Academy of Commerce (at the picture – monitoring mission).*

Governance Reform:

▪ a *strategy of a higher education institution's internationalisation* has been developed, a *Guide on practical internationalisation issues* and the *Booklet «Quality Assurance Tools for the Management of Education Internationalisation»* have been published by *Taras Shevchenko National University of Kyiv* and *Zaporizhzhia National University;*

▪ an *international cross-university network* (Ukraine, Russia, Belarus, Azerbaijan) has been created for cooperation with regional enterprises from *energy sector*; a new study programme «*Technology Transfer Management*» has been designed by *Ivano-Frankivsk National Technical University of Oil* and *Gas and Yurii Kondratiuk Poltava National Technical University*;

▪ a **best-practice Model of Doctoral schools** to implement 5 PhD programmes has been developed and a package of relevant *documents* has been drafted by the *National University of «Kyiv-Mohyla Academy»* in cooperation with the *Ukrainian Catholic University* and *Petro Mohyla Black Sea State University,* Institute of Botany and Institute of Literature of the National Academy of Sciences of Ukraine .

Higher Education and Society:

▪ *MSc program on Interoperability, Security and Certification in Transport* was implemented by *Dnipropetrovsk National Lazarian University of Railway Transport* involving employers organizations such as State Administration of Railway Transport «Ukrzaliznytsya» (project event is at the picture);

▪ *Qualifications Framework* in the field of *Meterology* was developed by *Odessa State Environmental University* and *Taurida National V.I. Vernadsky University*;

▪ a *network* of *regional educational centres on modern technologies of local governing* was established for the staff of local state administrations, and training courses have been implemented at *Sumy State University, Ivan Franko National University of Lviv, Oles Honchar Dnipropetrovsk National University* and with participation of Ministry of Education and Science of Ukraine, Lviv Region Administration, Sumy Region Administration, Dnipropetrovsk Region Administration;

▪ a *model of research and business university* had been designed, *offices of international research and innovation cooperation* have been established, and the *book «Knowledge Triangle Education-Research-Innovation: European experience and their applications in Russian, Ukrainian and Moldovan Universities»* was published by *Taras Shevchenko National University of Kyiv;*

▪ a *national networking platform «Universities 4 Innovation»* and *innovation offices* had been established in six universities: *Zhukovsky National Aerospace University «Kharkiv Aviation Institute», Donbas National Academy of Construction and Architecture, National Metallurgical Academy of Ukraine, I.I. Mechnykov Odesa National University,* Crimean University of Humanities, *Lviv Polytechnic National University*;

▪ a *network of portals for e-learning of tourism industry specialists* had been established on the basis of the following HEIs: *National Transport University, Kyiv University of Tourism, Economics and Law,* Taurida National V.I. Vernadsky University, Yalta University of Management, *Odessa National Maritime Academy, Pryazovskyi State Technical University, Vasyl Stefanyk Precarpathian National University of Ivano-Frankivsk,* Donetsk Institute of Tourist Business.

Nine projects under the Tempus IV *4th* call for proposals (**2011–2014**) are almost finilized their activities at *21 higher education institutions* of Ukraine in various areas.

Within the National Project on **Structural Measures** under the **Governance Reform** priority, proposals for providing a unified transparent *national system of higher education quality assurance* have been created by means of developing and implementing procedures based on relevant trusted information sources and a system of quality criteria and indicators presented on the national *Internet-portal – Ecosystem (*www.dovira.eu*)*. Besides, a governance model for quality assurance framework is planned to be created and, accordingly, measures will be prepared and taken to improve the national regulatory legal framework in order to implement the procedures and processes developed. This work is supported

by the *Parliament' (Verkhovna Rada of Ukraine) Committee on Science and Education, the Ministry of Education and Science of Ukraine* and involves the project's Ukrainian partners: *Kharkiv National University of Radioelectronics, National Academy of Managing Personnel of Culture and Arts, Ukrainian Catholic University, Yurii Fedkovych Chernivtsi National University* with participation of Ukrainian Association of Student Self-Government, State Accreditation Commission of Ukraine, Institute of Higher Education of the National Academy of Educational Sciences of Ukraine (at the picture).

The following results are achieved within the framework of *eight **Joint Projects**.*

Curricula Reform:

▪ *special BSc courses (Geriatrics, Public Health)* have been designed in line with European standards in medical education and *Teacher Training Centers* are established/modernized – *O. Bohomolets National Medical University* and *Ivano-Frankivsk National Medical University* with participation of Testing Board under the Ministry of Healthcare of Ukraine (professional competencies testing in fields Medicine and Pharmacia);

▪ inter-disciplinary *MSc and PhD* programs on *Energy* and *Environmental Law Studies* have been modernised, and *consultancy offices* on *Energy Law* are established at *Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», Melitopil State Pedagogical University, Yaroslav The Wise National Law University, Khmelnytsky National University;*

▪ a *double-degree MSc programme in Automation/Mechatronics* has been developed, a *quality assurance system* and the *International Hybrid Learning Space* are established – *Zhytomyr State Technical University, National Technical University of Ukraine «Kyiv Polytechnic Institute», National Technical University «Kharkiv Polytechnical Institute»,* Sevastopol National Technical University;

▪ developed *MSc programme on E-Commerce* to serve to Information Society in line with the new developments in the area – *National Mining University, Odessa National Economic University, Taurida National V.I. Vernadsky University (project event is at the picture);*

▪ *BSc and MSc programmes on Social Psychology* have been reformed in the light of addressing *migration problems* – Taurida National V.I. Vernadsky University, Crimean Engineering and Pedagogical University;

▪ reformed *MSc programme for engineers in Industrial Ecology* using problem based approach – *National Technical University of Ukraine "Kyiv Polytechnic Institute" and Chernihiv State Technological University;*

▪ modernized *MSc and PhD programmes on Intelligent Transport Systems* using ICT to improve efficiency and safety of transport flows – *Zhytomyr State Technical University,*

Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», Lazarian Dnipropetrovsk National University of Railway Transport, Odessa National Maritime University (project event is at the picture).

Higher Education and Society:

▪ establishing *centres of partnership with enterprises* with *equipped laboratories* to enhance cooperation between universities and enterprises by providing trainings and consultations by trained staff, *business plans* and *strategies for business development* as a ground to start business have been developed, as well as materials that is presented on the website – *National Metallurgical Academy of Ukraine, Yuriy Fedkovych Chernivtsi National University* and *Odessa National Polytechnic University*.

In the *5th call* for proposals under Tempus IV in *2012*, *53 higher education institutions* were involved in project implementation (including *nine* new participants) and started realisation of *23* projects.

Seven Structural Measures projects supported by the Ministry of Education and Science of Ukraine plan to achive be the end of *2015* the following results.

Governance Reform priority:

▪ to develop and implement *a comprehensive integrated information system on university management* that will be based at the European and national experience using the new *software on university management* based on the analysis of information flows and existing systems of university management; to prepare *Guides* for effective use of the mentioned system and provide training for staff – *Sumy State University, Ivan Franko Lviv National University, Khmelnytsky National University, National Mining University* with participation of the Institute of Telecommunications and Global Information Space of National Academy of Sciences of Ukraine;

▪ to generate *recommendations* for further reform of the *financial and institutional autonomy and accountability of higher education institutions* based on the analysis of the autonomy; to conduct seminars and workshops for representatives of higher education institutions, public authorities based on the best European practices; to improve the institutional and financial capacity of universities through the modernization of management and human resource development – *Taras Shevchenko Kyiv National University, Donetsk National University, Lesia Ukrainka Eastern National University, I.I. Mechnikov Odessa National University* with participation of the Association of Rectors of HE institutions of Ukraine;

▪ to increase the effectiveness of student services in higher education system of Ukraine through creation of *Centers for Student Support Services* at the *Donetsk National University, Taras Shevchenko Kyiv National University, V.N. Karazin Kharkiv National University* with involvement of the Ukrainian Student Self-governance Association. *Centres* should provide support to students at admission, graduation and post-study stages, in particular through *Alumni Associations*, namely: to modernize the process of vocational guidance in schools; to introduce psychometric testing to attract 'right students' for educational programs, to improve employment services in universities, using modern information technology and specially designed courses for students and employers; to conduct training on the development of communication competencies, enhance communication between Ukrainian and European student communities, to position Alumnai Associations as a resource for additional funding for such Centers; and to develop a *strategy* to implement these provisions at the national level via legislation basis.

Higher Education and Society projects priorities are:

▪ to develop and implement *methodological guidelines* and *courses on pedagogical innovations in inclusive education* for professional teacher training, to create the *National Network for Promoters of pedagogical innovations in inclusive education* – *National M.P.Drahomanov Pedagogical University, Odessa Regional Institute of Teacher Training* and *K.D. Ushinskyi Southern National Pedagogical University (*Odessa*)*;

▪ to establish the *national educational standards* for new courses to improve the training of Master students for innovation and entrepreneurship in *IT (Software Engineering)*, to develop *Virtual Innovative Space*, to develop appropriate *methodological guidelines* at *Ivano-Frankivsk National Technical University of Oil and Gas, Kharkiv National University of Radioelectronics, Lviv Polytechnic National University, Odessa National Polytechnic University, Vinnytsia National Technical University* in cooperation with the State Design Engineering Bureau «Yuzhnoye» (at the picture, p. 14);

▪ to develop *recommendations* for changes in the legislature on commercialization of innovations by universities as a 'roadmap' for universities, a *concept of commercialization of innovations in higher education* in Ukraine, and also to update the teaching methodology for development of competencies on introduction of innovations into market; to create *Help-Desks* for knowledge transfer *at the National Metallurgical Academy of Ukraine, Tugan-Baranovsky Donetsk National University of Economics and Trade, Ivano-Frankivsk National Technical University of Oil and Gas, Sevastopol National Technical University, National University «Odessa Law Academy»* with association of the Technopark «Oil and Gas», Technopark «Engineering Technologies»;

▪ based on the National and European Qualifications Framework, to develop the *sectoral Qualifications Frameworks for Information Science* and *Management* at Bachelor and Master levels – *Taras Shevchenko Kyiv National University, Ivan Franko Lviv National University, Khmelnytsky National University, National Mining University, Sumy National University* in partnership with the Dnipropetrovsk Chamber of Commerce and Industry, Institute of Telecommunications and Global Information, Union of Industrialists and Entrepreneurs of the Khmelnitskyi Region.

16 projects will be finished by the end of *2015* within the framework of **Joint Projects.**

Curricula Reforms priority:

▪ development of *courses in Architecture and Sustainable Urban Development* based on eco-humanist principles and new technologies without loss of identity, for Bachelor and Master programmes and professional training programmes at *Kharkiv National University of Civil Engineering and Arhitectura, Kyiv National University of Construction and Arhitectura, Odessa State Academy of Construction and Arhitectura, Pridniprovska State Academy of Construction and Arhitectura* with involvement of the Kharkiv City Council, Kharkiv Union of Architectors, Kharkiv Design Institute «Kharkivprombudproekt»;

▪ modernization of *Master's and Doctoral (PhD) programmes in Engineering* based on an interdisciplinary approach in accordance with technological challenges, development of a *concept for Engineering education reform* and *action plan* for the dialogue between higher education and employers, creation of *Interdepartmental Laboratory Technology and Product Design*, and *Council on Joint Curriculum* at *the National Metallurgical Academy of Ukraine, Sumy State University, Lutsk National Technical University, Zaporizhzhya National Technical University* with the participation of Zaporizhzhia Machine-Building Design Bureau «Progress»;

▪ development of *Master's and Doctoral (PhD) programmes in Green Computing and Communications* (GCC) using programming distribution systems (*Grids, Clouds*), creation of *PhD incubators of Green Computing and Communications* (PhD Webinars through Adobe Connect Pro platform, virtual theses pre-defences), and creation of the *«Green Computing and Communication» journal* at *the M.Y. Zhukovskyi National Aerospace University «Kharkiv Aviation Institute», Donbass State Technical University, Uzhgorod National University* with the participation of the H.Y. Pukhov Institute for Modelling in Energy, National Academy of Sciences of Ukraine (project event is at the picture);

▪ modernization of the *Master's Programme in infrastructure and operation of high-speed rail transport* in the context of modern requirements at *the Academician V. Lazaryan Dnipropetrovsk National University of Railway Transport, Ukrainian State Academy of Railway Transport* in cooperation with the State Administration of Railway Transport «Ukrzaliznytsia»;

▪ development of the *Bachelor and Master programmes and certified courses for professional development of teachers of Multilinguistic Education*, creation of a *platform* based on Moodle and Internet-sites, where the courses will be presented as well as publishing of *electronic journal «Bilingual Education»* at *the Oles Honchar Dnipropetrovsk National University, Ivan Franko Lviv National University*, Crimean Humanitarian University;

▪ development of joint *Master Programme «European Neighbourhood Policy, Law and Good Governance»*, which is based on the *research* approach and includes educational materials for 9 compulsoty courses and 2 modules with 3 selective courses each at *the Kyiv Taras Shevchenko National University, Ivan Franko Lviv National University, I.I. Mechnykov Odesa National University (at the picture inter-project meeting in KTSNU)*;

▪ creation of *inter-regional network of national centers on medical education* for implementation of *methodics on problem-based learning and virtual patient*, modernization of medical education via development of advanced courses with proble-based approach and IT *at the Sumy State University, Zaporizhzhia State Medical University*;

▪ creation of a *network «University – Media Industry»* (Dortmund model) to ensure jobs through established contacts, development of joint educational programmes, creation of a *network «Communicative Sciences – Media Politics»* to enhance interaction between higher education and media sphere at *the Yuri Fedkovych Chernivtsi National University, Volodymyr Hnatiuk Ternopil National Pedagogical University, Oles Honchar Dnipropetrovsk National University, V.I. Vernadsky Taurida National University, I.I. Mechnykov Odesa National University, Sumy State University* with participation of the Ukrainian Press Academy, Ukrainian Press Group (at the picture);

▪ modernization of *educational programmes in the field of Construction and Civil Engineering* in three-cycle higher education – *Bachelor, Master, PhD programmes*, in particular, through the implementation of new modules of energy, environmentally sustainable healthy environment using the tools of the Bologna process and development of *virtual inter-university network education system* (intellectual library, teaching systems, evaluation system, access to e-resources of research and educational information) at *the National Technical University «Kharkiv Polytechnic Institute», National Technical University of Ukraine «Kyiv Polytechnic Institute»;*

▪ development of *interdisciplinary programmes (MA, PhD in the sphere of Human Security (Human security and Environment. Food Quality and Human Safety, Public Health and Human Safety, Human Safety and Society)* in areas contaminated by radioactive substances as resuls of activities by producers of nuclear energy, nuclear waste processors, development of a *concept of interdisciplinary training in the field of Human Security*, update competencies for teachers at the *Zhytomyr State Technical University, Kyiv International University, Pyrohov Vinnytsia National Medical University*, Sevastopol University of Nuclear Energy with the involvement of H.M. Vysotskyi Polisskyi branch of the Ukrainian Research Institute on Forestry and Agroforest melioration;

▪ development of curricula for *Masters of Engineering Microsystems Design* by adapting/creating courses microsystems design, manufacturing and testing, integration of fundamental disciplines of engineering with a focus on *micro and nanomechanics* (based on the recommendations of the Euro Training project report (ICT-2007-211806), *installation of new equipped laboratories* for usage of design tools and

testing methodologies; also, organization of *Summer Schools* for theoretical and practical training at *the Kharkiv National University of Radio Electronics, Donetsk National Technical University, Taras Shevchenko Kyiv National University* with the participation of the Research Institute of Microdevices NAS of Ukraine, Scientific and Production Enterprise «CARAT», company «ALDEC-KTC LTD».

Governance Reform priority:

▪ modernization of higher education through governance *capacity building and management* of higher education institutions, development of *managers' leadership competencies* in higher education and *dialogue initiating* on education reform among stakeholders, development of a *change management strategy in higher education for youth and women leaders,* preparation of *teaching materials and methodological recommendations on leadership and change management* based on successful European models of leadership and change management, promote transnational cooperation stakeholders through virtual expert groups (think tanks) at *the National Technical University «Kharkiv Polytechnic Institute», Cherkassy State Technological University, Lutsk National Technical University, Lviv Academy of Commerce, National University «Lviv Polytechnic», Odessa National Economic University, Volodymyr Dahl East Ukrainian National University* (Severodonetsk, Luhansk Oblast).

Higher Education and Society projects priorities are at:

▪ development of cooperation between industry and creative *Engineering education through distance learning tools, virtual engineering tools,* curriculum development (24 modules) for acquiring by students of engineering specific competencies to improve their *employability and professional career* based on the European practices, expertise needs and requirements of the labor market, including development of methodology for identification and monitoring of these requirements and expanding producing practices at *the National Technical University «Kharkiv Polytechnic Institute», Ivano-Frankivsk National Technical University of Oil and Gas, Zaporizhzhya National Technical University* involving employers: Energy Service Company «Ecological Systems, JSC «Kharkov Online», Ukrainian Industrial Energy Company, Scientific and Industrial Company «Probe», Ukrainian Association of IT Professionals (project meeting is at the picture);

▪ development of *innovative hybrid strategy of IT outsourcing partnership with businesses* and creation of *outsourcing training and producing center* for student support at *the Kharkiv National University of Radioelectronics, Chernihiv State Technological University, Odessa National Polytechnic University, National Technical University of Ukraine «Kyiv Polytechnic University» (Institute for Applied Systems Analysis)*;

▪ creation of *inter-university network information and analytical Start-up Centers* for the development and promotion of student innovation, development of innovative courses in business, intellectual property protection, implementation and support for sustainable relationships with national and international investors and partners, modernization of *educational programmes on Engineering* and *Computer Science*, development of *methodology and e-learning materials* for 5 courses, creation of the *Internet-portal* and *e-platform* for distance learning, in particular, for Start-up Crash Tests for innovative ideas at *Kharkiv National University of Economics, Sumy State University, National University of Construction and Architecture, Ivan Pul'uj Ternopil National Technical University, Kharkiv National Academy of Municipal Economy (project event is at the picture)*;
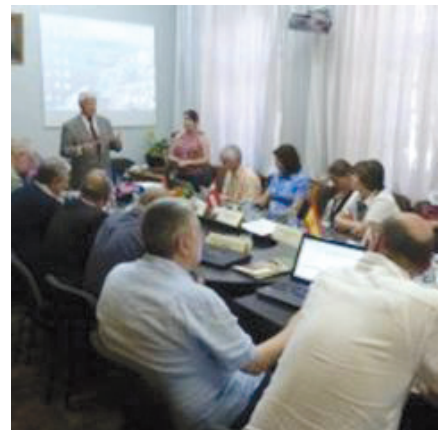
▪ building of a *network of innovative laboratories* to prepare students for innovation activities through the open learning platform at *the National University of «Kyiv-Mohyla Academy», National Technical University «Kharkiv Polytechnic Institute», Uzhgorod National University*.

In the *sixth call* of the Tempus Proramme IV in *2013*, *70* higher education institutions (including *12* new members) joined for *33* projects implementation by *2016*.

Seven of ***Structural Measures*** projects are carried out by the Ministry of Education and Science of Ukraine and intended for:

▪ development of a *strategy for development of lifelong learning (LLL)*, *its implementation plan* and *centers of lifelong learning;* the *legal and administrative framework* will be offered for higher education institutions; *guidelines for the implementation of lifelong learning* will be developed – *Kharkiv National University of Radioelectronics, National Technical University of Ukraine «Kyiv Polytechnic Institute», Odessa National Polytechnic University, Taras Shevchenko Kyiv National University*;

▪ development of a *Plan of activities for higher education, innovations and research integration* for establishment of links between higher education, research and production innovations, strengthening the *knowledge triangle* – *National Transport University, V. Dahl East Ukrainian National University* (Severodonetsk, Luhansk Oblast)*, Uzhgorod National University* with the assistance of the Association of Rectors of Universities of Ukraine and National Research Institute of Road Transport;

▪ development and improvement of university administration in the field of international relations through development of the *relevant documents for International Relations Offices capacity building* based on their mission and objectives formulation, setting-up international connections for inclusion of universities in the world rankings, flexible management tools as part of university management system – *Vadym Hetman Kyiv National Economic University, Poltava University of Economics and Trade*;

▪ strengthening of the role of Ukrainian universities in implementation of the *national policy on Human Resources development* as a mechanism of social progress through the implementation of *education for leadership, intelligence and talents development,* including development of methodologies and training materials for 3 spheres (education, public service, business), creation of the educational Online learning environment and training of certified trainers, development of the *Concept «The role of universities in leadership and organizational development»,* building of up-to-date equipped ***centers of leadership*** that will provide advice, training sessions, coaching, institutional audit, evaluation of leadership potential, organize *summer academy leadership* and create an *electronic journal* on Leadership and Organizational Development of Higher Education – *Higher Education Institute of the National Academy of Educational Sciences of Ukraine, Borys Grinchenko Kyiv University, Donetsk State University of Management* (Mariupol, Donetsk region)*, National Academy of Public Administration, the President of Ukraine, National Aviation University, National Technical University «Kharkiv Polytechnic Institute», Mechnykov Odessa National University (*instead of V.I. Vernadsky Taurida National University*), V. Hnatiuk Ternopil National Pedagogical University (project event is at the picture)*;

▪ *internationalization* of higher education through *cultural and structural changes transformations,* in particular, through the *integration of the international dimension* in teaching, learning and research

activities by implementing appropriate policies and procedures of internationalization, through the development of mobility and cooperation, promoting cross-cultural and international perspectives, *quality internationalization assurance (MINT approach)*, as well as functional review of international departments, use of software for necessary databases at *the National Metallurgical Academy of Ukraine, Odesa National Polytechnic University, Taras Shevchenko Kyiv National University, Yuri Fedkovych Chernivtsi National University*;

▪ development of *sectoral Qualifications Framework in the field of Environmental Sciences* for Ukrainian universities based on the analysis of existing methodologies and standards of qualifications frameworks, development of *training centers* to train in preparation and implementation of new educational programs under the framework of qualifications in the field of environmental sciences – *Odessa National Maritime Academy, Odessa State Environmental University, V.N. Karazin Kharkiv National University, Lviv National Agrarian University, Uman National University of Horticulture, National University of Life and Environmental Sciences of Ukraine* with the participation of the Scientific and Methodological Center for Agricultural Education, State Department of Environmental Protection in the Odessa region, Institute of Ecology of the Carpathians (project monitoring meeting is at the picture);

▪ creation of an *international network of entrepreneurs alumni associations* that brings together 11 universities in Ukraine, Moldova, Georgia to develop entrepreneurial ecosystem, building *fundraising* structures, providing special training, contacts with companies and government agencies – *Kharkiv National University of Radioelectronics, V.N. Karazin Kharkiv National University, Kharkiv National Automobile and Highway University, Yuri Fedkovych Chernivtsi National University, University of Economics and Law of «KROK» (*Kyiv*)*.

26 projects will be finished by the end of *2016* within the ***Joint projects*** priorities.

Educational Reform Programmes:

▪ development of *multidisciplinary educational programme* (120 ECTS) for graduate and postgraduate students, and courses for professional training of specialists on engineering with usage of e-learning (e-books, virtual environment, data base of training materials, etc.) for regional sustainable development through *eco-humanist synergetic interaction*, *training e-center* and *e-expocenter* development at *the V.N. Karazin Kharkiv National University, Kharkiv National University of Construction and Architecture, Lviv Polytechnic National University, Odessa State Academy of Civil Engineering and Architecture, Prydniprovska State Academy of Civil Engineering and Architecture, National Academy of Environmental and Resort Construction* (Simferopol, Crimea);

▪ introduction of a new *model of the third cycle of higher education in Engineering* in accordance with the Bologna process, which involves the development of new 8 core and 3 general courses, development of innovative learning environment that includes *offices «Doctor in Engeneering on market»,* a joint Internet platform, Laboratory of doctoral colloquia, doctoral summer schools at the *Cherkassy State Technological University, National Aviation University, National Technical University of Ukraine «Kyiv Polytechnic Institute»* with participation of the State Design Engeneering Bureau «Yuzhnoye» (project event is at the picture);

▪ creation of a *center of excellence for education and training on effectiveness with heterogeneous groups of children and young people* for teachers and educational leaders based on analysis and *cataloging* the specific competencies required for a *Bachelor's* level within educational profile,

Master in Educational Management in heterogeneous organizations at *the M.P. Drahomanov National Pedagogical University, Berdyansk State Pedagogical University, Khmelnytsky National University* with participation of Children's Fund «Sunshine Children's Center»;

▪ development of a *joint multidisciplinary Master's program in Biomedical Engineering,* using the results of Tempus CRH-BME, learning *Biomedical Labs,* joint *center of documentation in Biomedical Engineering* at *the National Technical University of Ukraine «Kyiv Polytechnic Institute», Sumy State University;*

▪ introduction of *innovative* teaching and learning of the *European Studies* within Master's programme that envisages e-learning, usage of simulation-based training, modules based on the online interactive Internet-site and wiki, and the creation of *the National Center for European Studies* at the *National University of «Kyiv Mohyla Academy», Yuri Fedkovych Chernivtsi National University;*

▪ modernization of *engineering education for environmentally sustainable industrial development* for Master, Doctoral (PhD) programs and training courses in the fields of mining, metallurgy, energy, engineering and mechatronics, course «*Environmentally Sustainable Industrial Development»,* development of *guides* for LLL reforming, *book* «*Engineering Education for Environmentally Sustainable Industrial Development», Action Plan «Higher Education for Environmentally Sustainable Industrial Development»* and development of the *sustainable development centers* and cooperation *platform* for teachers, researchers, industry and public institutions at *the Donetsk National Technical University, Ivano-Frankivsk National Technical University of Oil and Gas, Kryvyi Rig National University, National Metallurgical Academy of Ukraine,* Sevastopol National Technical University (project event is at the picture);

▪ upgrade of the *Master, PhD education, in-service professional training* of *cyber security* for areas related to human and industry: Human {people; country}; Business {banking; Internet & e-business; Telecommunications}; Critical security {aircraft; space; railway}, building capacity of *the national security offices alliance* to integrate educational programmes, methods, techniques in the field of cyber security at *the M.Y. Zhukovsky National Aerospace University «Kharkiv Aviation Institute», Khmelnytsky National University, Academician V. Lazaryan Dnipropetrovsk National University of Railway Transport, University of Banking of the National Bank of Ukraine, Volodymyr Dal Eastern National University (*Severodonetsk*), Ivan Pul'uj Ternopil State Technical University* in partnership with the Ukrainian Federation of Industrial Safety Institute of Special Communication and Information Security, NPO «Radii», Ukrainian Student Self-governance Association;

▪ upgrade of the courses (*Civil Procedure Trade Procedure, Labor Law, Environmental Law, Criminal Procedures*) for the *Master's programme on Economic Law and Alternative Dispute Resolution* at *the Ivan Franko Lviv National University, Khmelnytsky University of Management and Law, V.N. Karazin Kharkiv National University;*

▪ modernisation of the curricula for degree (Bachelors/Masters) programs in training *Engineering Materials* based on competency approach and best practices on implementation of the Bologna process, including the development of new core 9 and 3 general courses, *laboratories* and *joint online Internet-platform,* creation of *offices for Engineering Materials* at *the Lutsk National Technical University, Lviv Polytechnic National University, National Technical University of Ukraine «Kyiv Polytechnic Institute», Pryazovskyi State Technical University* with the participation of Metallurgical Works «Azovsteel» (Metinvest Group);

▪ development of the practice-oriented courses in the *Embedded Systems Design* using innovative approaches to virtual integration of science, education and industry, and development of *laboratories and e-learning platforms for embedded systems design* at the *Zaporizhzhya National Technical University, Borys Hrinchenko Kyiv University, Crimean Engineering and Pedagogical University, Donbass State Engineering Academy* (Kramatorsk);

- development of a *joint Master's Programme «International and European Law» with double diplomas*, training *textbook «European Law»*, creation of *Centers for International and European Law* at *the V.I.Vernadsky Taurida National University, Donetsk National University, National University «Odesa Law Academy»*;

- development of new *models of teaching language education*, development and implementation of a new two-year Master's programme for *teachers of French, German and English* on the basis of information technology at *the Kyiv National Linguistic University, Mykolaiyv National University (project event is at the picture)*;

- development of two *Master's and Doctoral (PhD) programmes with joint degree in Architecture/Urban Planning* and *Climate Engineering/ Environmental Sciences* at *the Donbas National Academy of Civil Engineering and Architecture, Donetsk National Technical University*;

- creation of *a new Master double degree programmes* to train a new generation of experts in *Information Security/Cyber Security*, creation of a *laboratory environment based on cloud technology*, preparation of training courses for in-service professional training of public servants involved in computer crimes and investigations at *the Kharkiv National University of Radioelectronics, Lviv Polytechnic National University*, Sevastopol National Technical University, *State University of Telecommunications* with involvement of Kharkiv State Information Security Center, Ukrainian group of Information Security, Research and Production Association «Radio and Telecom Systems», students organisation «AIESEC Ukraine»;

- modernization of *Master's programmes in Engineering*, in particular, including of the *Advanced Industrial Informatics Specialization Modules* (AIISM), implementation of the *problem-based methodology of training* for highly qualified engineers in the field of modern industrial information systems design at *the National Technical University of Ukraine «Kyiv Polytechnic Institute», Odessa National Polytechnic University*.
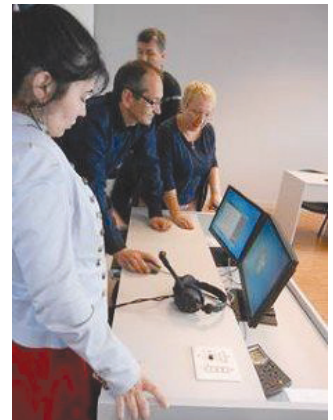

Governance Reform priority:

- Achieving and monitoring of a balance between *education programmes* and *qualifications frameworks* at *the Khmelnytsky National University, Taras Shevchenko Kyiv National University, Sumy State University* in cooperation with Ukrainian Student Self-governance Association and the Union of Industrialists and Entrepreneurs in Khmelnitskyi region (project event is at the picture).

Higher Education and Society priority:

- Creation of regional *competency center* for the development of *cruise tourism* in the Black Sea at *the Odesa National Maritime Academy, Kherson National University*, V.I. Vernadsky Taurida National University, Crimean Humanitarian University with the participation of the Association of the Black and Azov Seas (llichivsk, Odesa region), State Enterprise «Odesa Sea Commercial Port», State Inspection on Safety in Maritime and River Transport (at the picture);

- development *conception* education and re-training of teachers in *Environment* and implementation of *distance learning courses on environmental education* for lifelong learning for university professors and school teachers at *the National Transport Univetrsity,* V.I. Vernadsky Taurida National University, *Yuriy Fedkovych Chernivtsi National Univetrsity, Hryhoriy Scovoroda Pereyaslav-Khmelnitskyi State Pedagogical*
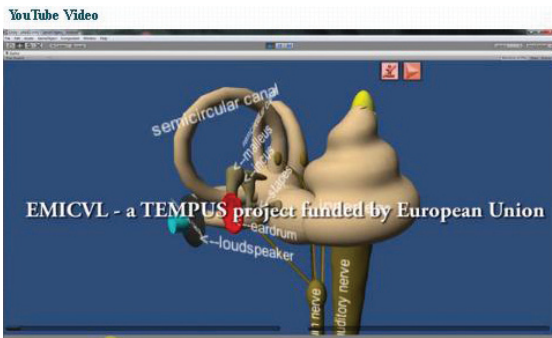
University and Vocational Education Institute of National Academy of Educational Sciences of Ukraine;

▪ *interdisciplinary innovation centers for development of virtual laboratories in Biology and Medicine using the Virtual Medical Microbiology Laboratory (EMICVL)*, which are developing innovative products based on research involving teaching staff, graduate students and undergraduates working with information technology, biomedicine, marketing and implementation of business and commercialization at *the Ivan Franko Lviv National University, I.I. Mechnykov Odessa National University*;

▪ design of 5 *training centers* equipped with *20 mobile TATU Smart Labs*, training for certification of automation technology, including the creation of a *platform for e-learning and collaboration*, development of electronic courses on automation technology at *the Donetsk National Technical University (*Krasnoarmiysk, Donetsk Oblast)*, Ivano-Frankivsk National Technical University of Oil and Gas, Kharkiv National University of Radioelectronics, Odessa National Maritime Academy, Odessa National Polytechnic University*;

▪ creating 6 *divisions for knowledge transfer* to ensure implementation of applied research, exchange of technological and business know-how, development of interdisciplinary practice-oriented training modules through close cooperation between universities and enterprises at the *M.E. Zhukovsky National Aerospace University «Kharkiv Aviation Institute», Khmelnytsky National University, Dneprodzerzhinsk State Technical University, Hetman Petro Konashevich-Sahaydachnyi Kiev State Academy of Water*

Transport, University of Banking of the National Bank of Ukraine, International Science and Technology University with involvement of the Ukrainian Institute for Scientific, Technical and Economic Information, Dnipropetrovsk Aggregate Plant, Transcarpathian Chamber of Commerce, Association of Ukrainian student governance, the Centre for Innovative Engineering Technology (project event is at the picture);

▪ development of the *center of excellence for young researchers* and *virtual portal to support young researchers, professors and businessmen* at *the Zaporizhya National Technical University, National Metallurgical Academy of Ukraine, National Transport University* with participation of the Scientific Production Company «Radium»;

▪ organization of *counsultation centers* for students' acquiring of professional and entrepreneurial competences through formation of entrepreneurial spirit, the implementation of courses in economics, technology, languages, advice for start-ups at *the Kyiv National Economic University, National Technical University «Kharkiv Polytechnic Institute», Chernihiv State Institute Economics and Management, Vasyl*

Stefanik Precarpathian National University in partnership with the Chamber of Commerce and Industry of Ukraine (project event is at the picture);

▪ development and implementation of *model-based approach to the evolution of cooperation between higher education and business* in the field of *Electronic* and *Computer Engineering* and intelligent system for analysis and evaluation of results and making recommendations for attracting educational and business structures, drafting of the *White Paper*

that will include a set of relevant protocols and standards with specification of all possible scenarios, objectives and results of these models, the development of practical guidelines to implement the model-based approach for university departments of various types and various preferred ways of cooperation with industrial partners, creation of the *Internet portal for communications through cloud technology* to better use models presented in the White Paper at *the Chernihiv State Technological University, Yuri Fedkovych Chernivtsi National University, M.E. Zhukovsky National Aerospace University «Kharkiv Aviation Institute», Odesa National Polytechnic University, Petro Mohyla Black Sea State University, Sevastopol National Technical University* with the participation of the Institute of Cybernetics of National Academy of Sciences of Ukraine and the Association of IT enterprises of Ukraine;

▪ creation of *inter-regional network of innovation for innovative development of ecosystems technosphere* (education – research – production – implementation – utilization) *based on micro- and nano technology,* using the results of Tempus projects in the field of 'green' technologies (GREENCO), innovations (UNI4INNO), law in the field of energy and environment (REGENLAW), development of the international online platform for collaboration between commercialization of eco-innovations, organization of trainings for eco-engineering professionals, and the development of a new Master's program in micro- and nanotechnology in technosphere ecosystems (90 ECTS) at *Zhukovsky National Aerospace University «Kharkiv Aviation Institute», Zaporizhia National Technical University, Donbass State Engineering Academy* (Kramatorsk) with the participant of the JSC «Motor Sich» and Kharkiv Institute of Physics and Technology;

▪ capacity building and equipping of the *third age education centers* to ensure social inclusion of old age people, development of *concept and models for the third age education*, creation of a scientific *virtual network of European and national experts on the third age education*, preparation of training materials, *multimedia laboratories*, development of the *Internet platform*, drafting fundraising plan to support centers at *the Donetsk State University of Management, Volyn Institute of Economics and Management, Crimean Humanitarian University.*

As a matter of fact, diversity of project topics, their objectives are targeted to the higher education development with focus on *curricula reform (52%), higher education and society (33%)* projects are very actively implemented while *governance reform* projects *(15%)* are not so active. The majority of projects were developed as *Joint Projects (over 80%)* focused to local and institutional challenges comparing to the *Structural Measures (less than 20%)* projects directed to meet challenges at the national level.

Table 1

Breakdown of Tempus IV project subjects by area (2007–2016)

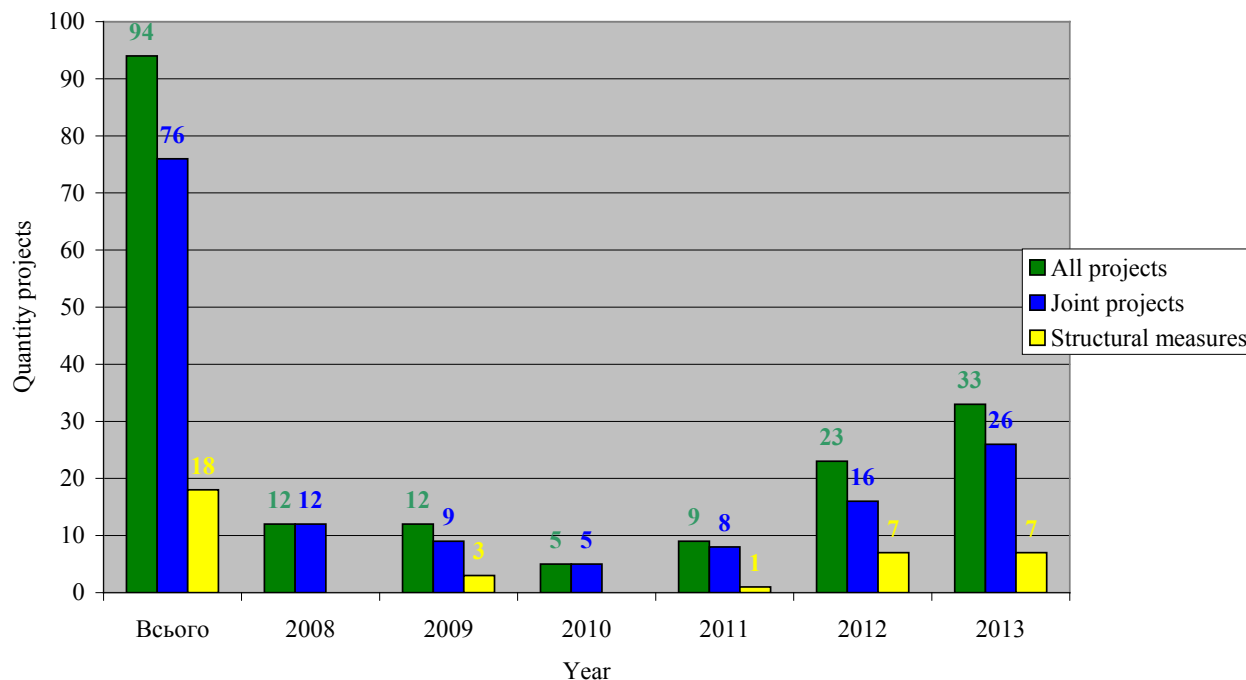| Title	Number	Type	
		National	Multi-country
Joint Projects	76	14	62
Structural Measures	18	6	12
Multi-country	49	39 – East Europe and Caucasus region	
National	18		
Curricula Reform	49	9	40
Governance Reform	13	2	11
Higher Education and Society	31	9	22
Thematic Network	1		1
Partners	1539		
EU Member States	463		
Partner countries	1076		

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Fig. 1. Quantitative breakdown of Tempus IV projects in Ukraine by year

A distinctive feature is the range of 14 countries – Ukraine's partners, not EU member states, in Tempus IV projects, which is determined first of all by there being no language barrier in the implementation of international cooperation and by similar historical societal development. Russian Federation, Belarus, Moldova and Georgia are leaders in terms of the quantity of joint projects.

Table 2

Ukraine's regional partnership in Tempus IV projects (2007–2016)

No.	Partners	Number of projects	Number of coordinators	Number of institutions
1.	*Russian Federation*	*33*	*2*	*181*
2.	*Belarus*	*25*	–	*91*
3.	*Moldova*	*20*	–	*64*
4.	*Georgia*	*22*	*1*	76
5.	**Armenia**	**15**	2	**61**
6.	**Azerbaijan**	**9**	1	22
7.	**Kazakhstan**	**7**	–	**24**
8.	Uzbekistan	4	–	15
9.	Kyrgyzstan	3	–	10
10.	Israel	2	–	3
11.	Tajikistan	1	–	3
12.	Bosnia and Herzegovina	1	–	3
13.	Macedonia	1	–	9
14.	Morocco	1	–	1

As to partnership with the EU universities in Tempus IV projects, such relations rest upon the ties built due to a variety of previous joint information and communication activities, research projects, other cooperation between education experts, researchers, managers, etc. Leaders among 27 partner EU member states in terms of the projects quantity are Germany, the United Kingdom, Italy, Spain, Sweden, Poland and Austria.

Table 3

Ukraine's partnership with the EU countries in Tempus IV projects (2007–2016)

No.	Partners	Number of projects	Number of coordinators	Number of institutions
1.	**Germany**	**41**	**21**	**67**
2.	**UK**	**33**	**10**	**41**
3.	**Sweden**	**27**	**14**	**34**
4.	**Spain**	**30**	**3**	**31**
5.	**Italy**	**31**	**2**	**41**
6.	**Poland**	**22**	**4**	**28**
7.	**Austria**	**20**	**4**	**24**
8.	**France**	**18**	**4**	**25**
9.	**Portugal**	**18**	**1**	**21**
10.	Belgium	*15*	5	17
11.	The Netherlands	14	2	14
12.	Slovakia	12	2	13
13.	Latvia	11	1	12
14.	Greece	11	1	11
15.	Bulgaria	11	1	11
16.	Finland	10	3	12
17.	Lithuania	9	5	10
18.	Romania	9	1	12
19.	Estonia	9	1	9
20.	Slovenia	8	1	10
21.	Hungary	5	0	5
22.	Czech Republic	4	1	4
23.	Ireland	4	0	4
24.	Denmark	3	0	3
25.	Croatia	2	1	2
26.	Cyprus	1	0	1
27.	Malta	1	0	1

Over the 20-year history of Tempus Programme in Ukraine, new higher educational institutions got involved in European educational projects every year; hence, a cohort of about *135* higher educational institutions (incl. *116* in Tempus IV, 2007–2013) – Tempus partners – from all regions of the country has formed, that being *37 %* of the total number of Ukrainian universities, institutes and academies.

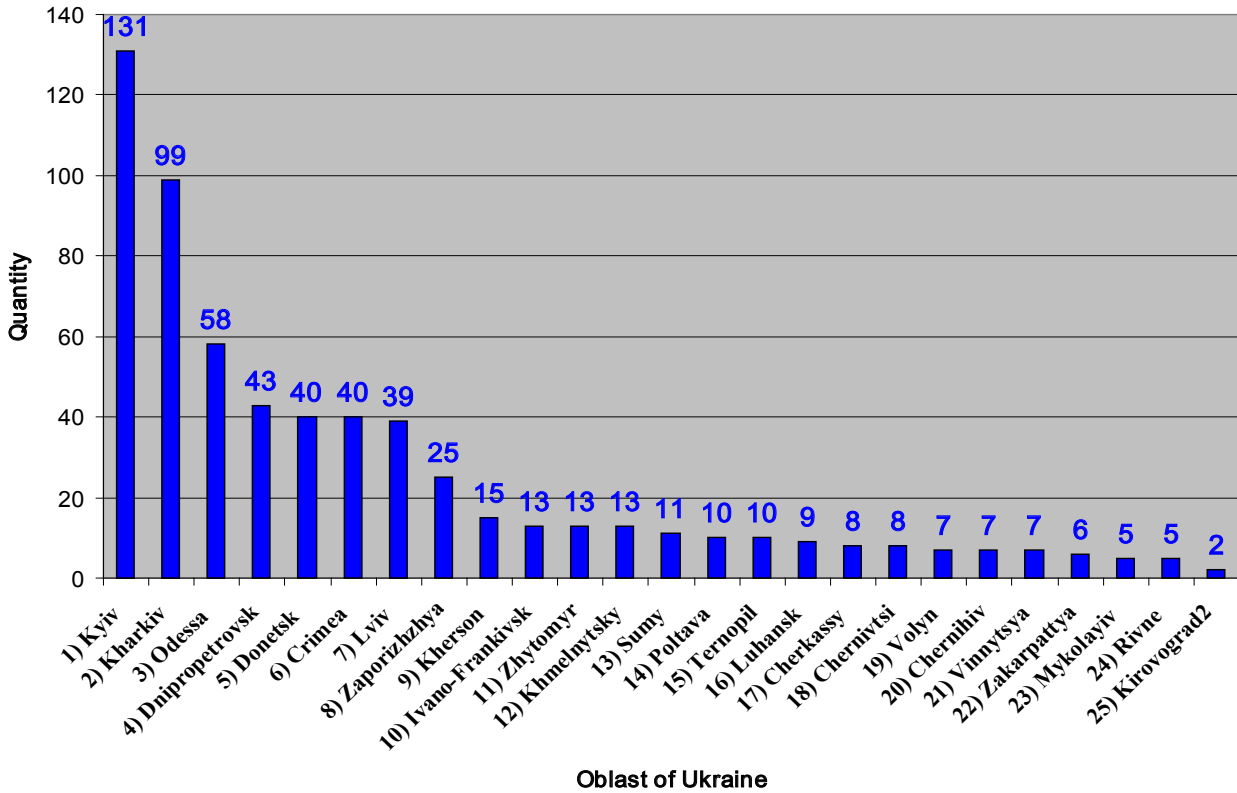## Quantity of Tempus projects: regional breakdown (1994-2013)

Fig. 2. Quantitative breakdown of Tempus IV projects by region of Ukraine
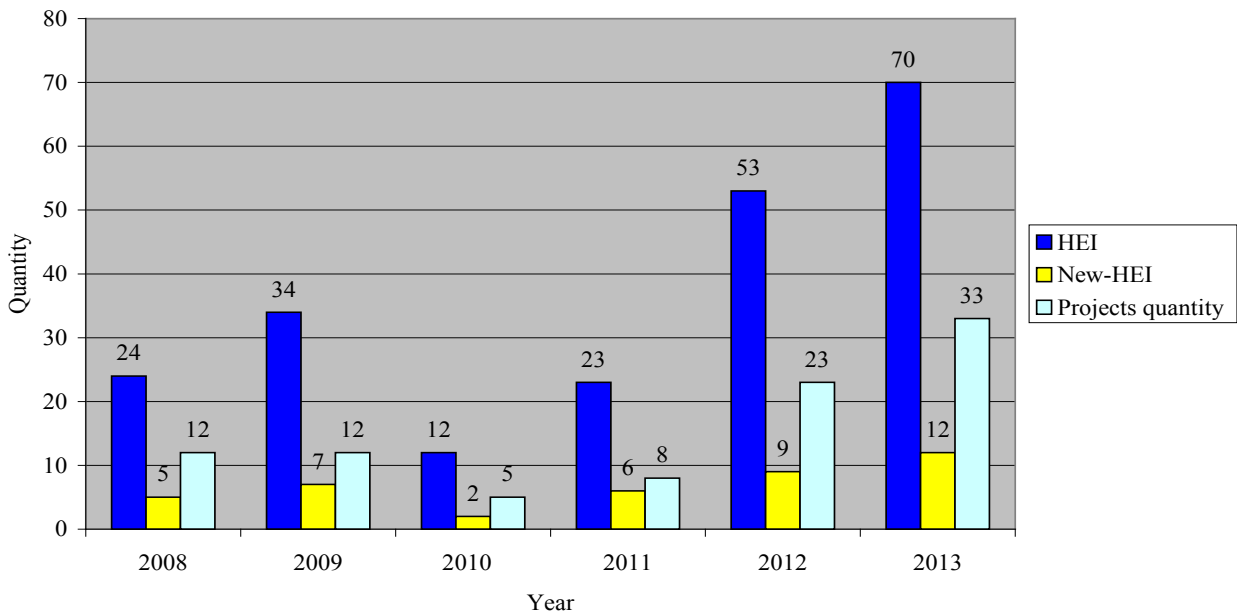
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Fig. 3. Quantitative breakdown of Ukrainian HEIs – Tempus IV participants by year

Besides, in addition to universities, other partners have been involved in Tempus Programme *since 2000* – research institutions, enterprises, non-governmental and community organisations, public authorities, and local governments.

In addition, *more than 100* such partners have become participants of Tempus Programme in Ukraine during 2000–2013, including: Secretariat of the Cabinet of Ministers of Ukraine; Ministry of Education and Science of Ukraine; *ministries* of Environment and Natural Resources; Agrarian Policy and Food; Regional Development, Construction and Housing and Utilities; Social Policy; Justice; Health; Infrastructure; Economic Development and Trade; State Statistics Service of Ukraine; State Agency of Water Resources of Ukraine; *regional chambers of commerce,* oblast *state administrations* and *local self-governments; research institutes* of the National Academy of Sciences of Ukraine, the National Academy of Educational Sciences of Ukraine, the National Academy of Law Sciences of Ukraine. *The following state and private enterprises were also involved in Tempus projects:* State Administration of Railway Transport of Ukraine «Ukrzaliznytsia», Design Bureau «Pivdenne» State Enterprise, Illich Mariupol Metal Works, «Motor Sich» JSC, «Azovstal» Metal Works, Kharkiv State Aviation Production Enterprise, «Antonov» State Company, Odessa and Illichivsk commercial sea ports, etc. *Non-governmental organisations also took part in the projects* such as industrialist unions, rectors unions, student organisations, etc.

Review of Tempus projects results and series of interviews with students, academics, administration of higher education institutions during monitoring missions in 2009-2013 provided for some *findings*.

Long-term results of education institutions' activities within Tempus projects include internationalisation of universities, establishment of long-term partnership between Ukrainian and European higher educational institutions that does not stop after project completion, and initiates of new joint research projects or academic mobility projects etc.

Tempus Programme promoted establishing communication between higher educational institutions and the Ministry of Education and Science of Ukraine and territorial education and science management bodies within local authorities and local governments, between academic teaching staff and university administration, between employers and teachers and students.

Tempus Programme allowed most of its participants to purchase *modern equipment and software* for arrangement of computer classes, video conference halls, special education and research laboratories, libraries, centres of training, consulting, career development, etc.

University professors confirm that *cooperation with their European counterparts* enabled them to acquire new knowledge and skills, implement new teaching and assessing methods, which eventually improved education quality and strengthened competitiveness of the higher educational institutions participating in Tempus Programme.

Project activities helped the higher education intuitions managers, teaching and research staff *determine and develop strategic areas of modernisation* of all teaching, training and administrative processes, in particular improvement of library work, use of multimedia, mobilisation of additional financial resources, strengthening of relations with industry, etc.

Cooperation with the academic and non-academic university staff involved in work placements positively affected management and self-governance procedures. Moreover, the work placements

resulted in development of new curricula, disciplines and modules, new teaching methods were implemented, and practical orientation of learning was strengthened. Students noted that involvement in innovative learning methods and concepts as well as awareness of the university from Europe culture *promoted improvement of communicative skills and intercultural dialogue, perfection of foreign language command, and development of a more self-dependent approach to learning.* Professors became more open and innovative.

Thus, Tempus Programme assists in preparation of a new generation of modern personalities capable of self-perfection and independence in making decisions concerning the present and the future.

The Ukrainian universities successfully reforming their curricula and training processes according to the *Bologna Process* provisions associate the progress achieved with their involvement in the Tempus Programme projects.

At the same time, along with benefits identified in the process of reviewing Tempus Programme's long-term history in Ukraine, some shortcomings and challenges have been found as preventing higher educational institutions from systemic realisation of international projects and from further use of achievements and outcomes of the Tempus projects in a more efficient way.

There are some *subjective shortcomings* that higher educational institutions are able to overcome.

Often curricula modernisation or development does not based on *modularisation approach*; study courses descriptions do not include learning outcomes, not using competence-based approach in line with *TUNING methodology* (EU project).

Students are involved not enough in realization of Tempus projects, particularly in development of curricula, learning outcomes, competencies set for graduates, establishment of different units for innovational activities, employability improvement, etc.

Within limited resources, modern information and communication *technologies* offer ample opportunities to promote educational programmes in the web-space, but higher educational institutions often fail to make the full use of this tool. Most universities provide limited information on international cooperation generally and on involvement in Tempus Programme in particular. Such project outcomes as joint curricula developed as part of the EU educational projects are not positioned as a result of international cooperation, and the Tempus Programme visibility rules are sometimes not observed.

The above-mentioned shortcomings also apply to other results of Tempus projects that are either hard to find, even having preliminary information, or are provided neither on the higher educational institution's website nor in other resources, all the more in English, and that are not presented to the educational community, the Ministry of Education and Science of Ukraine, employers, and other stakeholders.

Hence, remedying the situation requires no additional resources because information and communication technologies allow information to be updated quickly and disseminated not only in Ukraine but abroad as well.

The following *objective challenges on the process of implementing project results* are pointed out: Ukrainian higher education legislation's inconsistence with the contemporary European integration requirements, the Bologna Process and the European Higher Education Area provisions, which comes

out as a factor hindering implementation of project results, especially of *Structural Measures*, in particular:

▪ PhD Study (Aspirantura) is formally (Law of Ukraine «On Higher Education») a component of higher education or a third cycle, it does not comply with the European Higher Education Area standards and approaches yet. Hence, several Tempus projects aimed at developing modern doctoral schools and PhD programmes formally remain outside the Ukrainian higher education system and are implemented experimentally or in parallel with the current system;

▪ available *national and sectoral higher education standards*, from the list of fields and specialties to the list of prerequisite subjects and their adoption procedures, often fail to promote flexibility in joint curricula development, necessary for agreement of educational content, and to enable efficient implementation upon project completion. These challenges prevented development of competitive joint curricula for the purpose of involving not only national but also international students, but it will be changing in line with new *Law of Ukraine «On Higher Education»* thus novel higher education standards will be based on competence approach and learning outcomes and academic freedom and Universities autonomy are their indefeasible right;

▪ establishment of new Master's programmes was complicated issue because there was a requirement to include any new specialty (education programme) into part of State Standard – List of fields and specialties that is approved by the Cabinet of Ministry of Ukraine. Always the procedure took a lot of time and patience and actually it was not completed within realization of Tempus project. Now (*Law of Ukraine «On Higher Education»*) new education programme will be developed and quality assurance provided by University in line with novel higher education standards without undue delay.

In particular, the following is mentioned among *objective challenges* for the project *implementation process*:

▪ complication and restriction on usage of the universities' own revenues – special fund resources that, according to the current legislation (Budget Code of Ukraine), include Tempus grants. This situation aggravates risks for universities' efficient compliance with their obligations concerning the use of Tempus grant funds and makes it actually difficult to perform the grant holder and project coordinator role;

▪ the imperfect regulatory legal environment the universities operate in. It applies, first and foremost, to the regulation of the *financial and economic sphere* of higher educational institutions' activities. For example, since there is no relevant provision in the Tax Code, a complicated and lengthy procedure for Tempus projects registration must be followed to exempt them from taxes and dues on the procurements effected as part on international technical aid – Tempus Programme – as well as to ensure refund of any VAT paid.

Hence, because of some drawbacks in the Ukrainian laws it is often the case that leading universities with great international activity experience, having independently developed an idea and prepared all documents for a grant, are actually forced to search for a European university as a coordinator grant-holder and to give project management functions away to it.

Addressing the above-mentioned challenges there is a need for relevant amendments in the Tax and Customs Codes, other laws of Ukraine, and relevant bylaws.

Recommendations

1. *Initiate to improve the regulatory legal framework* according to the European Higher Education Area standards and new *Law of Ukraine «On Higher Education»* (2014) using Tempus projects results on implementation quality assurance systems and development of internationalization, three-cycle programs, double diploma programs, sectoral qualification frameworks in context of competence-based approach, DS, NQF and ECTS, academic mobility.

2. *Facilitate participation of representatives of the Ministry of Education and Science* of Ukraine *and strengthen the role of the Ministry* in project implementation, in exploitation and dissemination of project results.

3. *Engage employers* to development of higher education standards, sectoral qualification frameworks, courses, internship. Create favorable conditions for stimulation of employers for investing in universities' education, research and innovation.

4. *Involve graduates, students, young researchers into* the process of *curricula development* on competence-based approach, which foresees learning outcomes described based on competence of future professional at all level, as well as *into the capacity building* of departments on research, innovation, career development and employability, etc.

5. *Reinforce the focus on systematic studies* on state of play of higher education reforming and analysis of legislation that help to define project idea and risk assessment as well as ensure effective implementation.

6. *Conduct* on regular basis seminars and trainings on implementation of Bologna instruments: ECTS, Qualification Frameworks, competence-based approach, etc.

7. *Promote to the international educational market Joint curricula for Master and Doctoral (PhD) levels* developed within Tempus projects to engage international students and allowing an individual to receive two or more degrees from partner universities. Hence, to increase opportunities to participate in new EU educational program Erasmus+.

8. *Develop the third higher education cycle – structured PhD programmes* based on modern approaches and international experience in the doctoral school format, using corresponding results of a number of Tempus projects aimed at developing research training and doctoral schools. The modern research education is a drive of innovative development of society and ensures a nation's competitiveness.

9. *Ensure inclusiveness of specific courses for soft/transferable competences development* into modernized and created Bachelor, Master and Doctoral (PhD) programmes for the purpose of graduates' *employability* enhancement.

10. *Implement the joint use of the various modern equipment and software* purchased within the Tempus project by partner universities (computer classes, video conference halls, special education and research laboratories, libraries, etc). Hence, higher education institutions will be able to continue the process of modernisation and improvement of training in a certain profile, commenced by a Tempus project, at other universities.

11. *Place* results of Tempus projects – *Guidelines* on university governance, students self governance, quality assurance system, internationalization – *on the websites* of the universities – projects partners and present it during various information and communication events so that other higher educational institutions could use them in their work. Provide with open access to *Internet resources* as results of Tempus projects (electronic consulting networks, e-libraries, platforms, Internet portals, media centres, distant learning systems, etc).
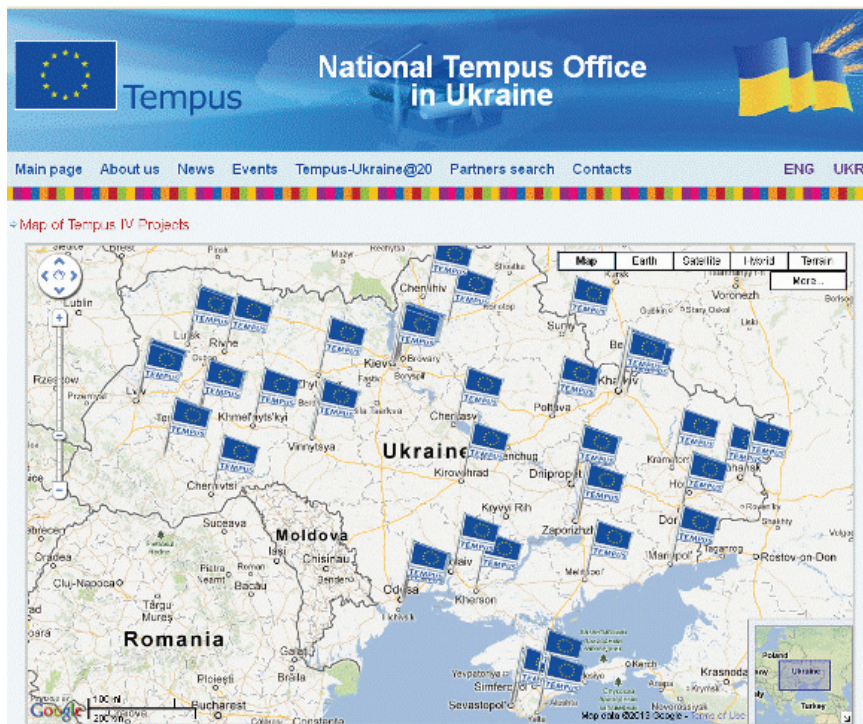
12. *Disseminate detailed information on the Tempus projects results* in Ukrainian and English languages (not only the project title, goal, objective and implementing entities) both on the website of the higher educational institution (international relations) and on the websites/pages of its structural units directly implementing the project as well as on the websites/pages of the centres, offices, sections, laboratories, etc. established within the Tempus project framework.

13. *Promote results of Tempus projects* and disseminate information in the Internet space, it is necessary to make the most use of educational Internet resources and the website of the Ministry of Education and Science of Ukraine not only during project implementation but also after that, to ensure sustainability of the project results.

14. In the section presenting the list and description of educational programmes (Bachelor, Master, PhD, skills improvement, trainings, etc.), it is important to state that the joint programme is a *result of Tempus Program and cooperation between Ukrainian and European and other experts*. Such measures will attach weight to results of project teams' work, and draw attention of potential university applicants, employers, other users, etc.

15. *Mechanisms and resources to involve relevant stakeholders*, national and local authorities in particular should be specified in order to ensure project results sustainability in two-three years period of time after the project end.

16. *Develop strategic projects* with focus on achievement of specific purpose and objectives over 5-10 years using international projects: as an example *to enhance social dimension of higher education* by expanding courses to different audiences – housewives, newly set enterprises, retired citizens, disadvantaged groups etc., and *to increase multi-disciplinary aspects* of programs that are of interest to professionals in the different domains (e.g. e-trading systems are in interest of engineers, economics, IT specialists).

17. *Support changing* to Budget, Tax and Customs Codes, other laws of Ukraine and legal acts initiated by Parliament's Committee of Education and Science and Ministry of Education and Science of Ukraine. Changes concern to problem of HEIs own incomes management – special fund, including EU funded programs in higher education and sciences.

18. *Initiate simplification of the registration procedures* of international assistance projects in order to receive VAT and custom fees exempt for procurement activities in frame of EU funded projects.

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19. *To utilize actively the projects outcomes* using the database and information of the activities performed: http://erasmusplus.org.ua/2014-05-30-14-56-19/prezentatsii/category/6-novyny-ta-baza-proektiv.html

20. In order to promote, disseminate and use the projects results, it is recommended to organize projects fairs, final projects conferences at the national level (such initiatives were organized in 2012 during the Conference on Bologna Process and in 2013 the Tempus-Ukraine@20).

As a result of a successful implementation of Tempus, Erasmus Mundus and LifeLong Learning programmes, the European Union has launched new initiative combining all under umbrella of Erasmus+, Programme for 2014–2020 to support projects, partnerships, events and mobility in the areas of education, training, youth and sport, which opens more opportunitites for Ukraine as a partner-country to cooperate and exchange of best practices.

The calls for proposals are open, all are invited to participation in 2014–2020
http://ec.europa.eu/programmes/erasmus-plus/index_en.htm