

The forthcoming ACAA between the EU and Ukraine: What to expect

by Veronika Movchan, Garry Poluschkin and David Saha



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CONTACT

Garry Poluschkin, Project Manager Ukraine
poluschkin@berlin-economics.com

German Economic Team

c/o BE Berlin Economics GmbH
Schillerstraße 59 • 10627 Berlin
Tel: +49 30 / 20 61 34 64 0
info@german-economic-team.com
www.german-economic-team.com

Implemented by



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Institute for Economic Research and Policy Consulting

Reytarska 8/5-A,
01030 Kyiv, Ukraine
Tel: +38 044 / 278 63 42
Fax: +38 044 / 278 63 36
institute@ier.kiev.ua
www.ier.com.ua

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Executive Summary

The DCFTA between Ukraine and the EU envisages the near elimination of customs tariffs and reduced non-tariff barriers to trade, aiming at 'internal market treatment' for some Ukrainian products. For the manufacturing sector, that primarily implies reducing the costs of compliance with differential product safety regulations by aligning the legal and institutional frameworks and concluding an Agreement on Conformity Assessment and Acceptance of industrial products (ACAA), a special type of the mutual recognition agreements offered by the EU to some of its partners.

The specific characteristic of the ACAA is that it requires the alignment of the partner country's legislative system and quality infrastructure with those of the EU before conclusion. Hence, preparation for an ACAA is much more cumbersome than for usual mutual recognition agreements. Still, this alignment provides an additional guarantee for the high reliability of the conformity assessment procedures and opens the door for agreements with a wider range of countries. So far, the EU has only one concluded ACAA, with Israel. The ACAA with Ukraine could become the first ACAA concluded by the EU with a middle-income country. It is a very ambitious plan that underlines the special character of the EU-Ukraine bilateral relations and will generate important image gains for Ukraine.

In October 2020, upon Ukraine's request, the European Commission launched a pre-assessment expert mission to evaluate the country's readiness to open the ACAA talks. The report covering legal readiness was delivered in May 2021. Ukraine has made significant legal harmonisation progress, although some further alignment is needed. However, the main challenge is in proving the soundness of quality infrastructure, particularly accreditation, conformity assessment and market surveillance.

The ACAA will include a framework agreement, providing the recognition of equivalence of the conformity assessment, verification and accreditation procedures, and annexes setting out the products covered. Therefore, the conclusion of the first ACAA, containing the framework agreement, is crucial as the institutional processes are essentially cleared at this stage.

In the product categories covered by the ACAA-, the EU is the largest trade partner of Ukraine, accounting for over 40% among both exports and imports. As of today, ACAA-covered products play a moderate role in Ukraine's exports to the EU, accounting for USD 0.8 bn or 5%. The range of exported goods is modest, with ignition wiring sets and boards for electric control constituting about one-fifth of shipments. Imports of the ACAA-covered products are much larger at USD 4.4 bn or 20%. They are also more diversified, encompassing many investment products.

We assess the impact of the ACAA based on a survey of companies conducted in cooperation with the European Business Association, the German Eastern Business Association and the German-Ukrainian Chamber for Industry and Commerce. In-depth individual interviews and modelling techniques further complemented the survey results.

Our analysis showed that the ACAA would have a wide range of effects on Ukraine's trade with the EU and other partners and Ukraine's economic development. It would:

- Save costs for exporting and importing goods, which are already traded between Ukraine and the EU, and stimulate trade with the EU. Our estimates show that the ACAA can reduce Ukraine's exports costs for relevant products by 4.9% and imports costs by 2.3%

- Reduce regulatory risks and bureaucratic costs associated with an additional conformity assessment creating additional trade stimulus;
- Start trade with goods, which so far were not traded, and by new (smaller) companies, which so far did not trade, because of the high cost of additional conformity assessment.
- Allow faster market placement of new innovative products in both destinations thanks to shorting time for compliance checks;
- Stimulate exports of relevant goods to other destinations using the EU-equivalent conformity as a strong selling point;
- Simplify a conclusion of mutual recognition agreements with other trade partners, thereby creating a fundament for further cost reduction and trade expansion;
- Make import of the EU capital goods cheaper that means more investments, higher productivity and eventually a faster economic growth;
- Create incentives for FDIs inflow and involvement of Ukraine into global value chains.

To capture the economic benefits of the ACAA, Ukraine is expected to ensure fast and coherent implementation of the EU pre-assessment mission's legal recommendations and intensive development of Ukraine's quality infrastructure, including their technical and personnel capacities. Special attention should be paid to renewing the National Accreditation Authority status of the bilateral agreement signatory with the European Cooperation for Accreditation for inspection and product certification. The EU side should provide continuous assessment of the progress and timely recommendations to correct the path to ensure that efforts are well-targeted.

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1 Introduction

The Deep and Comprehensive Free Trade Area (DCFTA) between Ukraine and the EU concluded in 2014 envisaged the near elimination of customs tariffs and reduced non-tariff barriers to trade aiming at ‘internal market treatment’ for some Ukrainian products. For the manufacturing sector, that primarily implies reducing the costs of compliance with differential product safety regulations between Ukraine and the EU, which constitute technical barriers to trade (TBT).

There are two key elements for lowering compliance costs. First, the partner countries can apply the same product safety requirements. That allows producers to save on costs related to adaptation of their production lines to destination market safety requirements, as domestic and target export market requirements are identical. This cost-saving is achieved by legal harmonisation and alignment of procedures related to compliance checks. Second, the partner countries can mutually recognise the results of conformity assessment procedures performed by partners’ responsible institutions so that producers and exporters can avoid re-testing costs.

The DCFTA allows for both elements of TBT costs to lower. First, Ukraine has committed to aligning its legislation and quality infrastructure with the EU norms and practices and maintaining this alignment by following changes made to EU regulations. That would create the same safety requirement space in Ukraine as in the EU. Second, the conclusion of an Agreement on Conformity Assessment and Acceptance of industrial products (ACAA) that can be added to the agreement allows mutual recognition of the conformity assessment results. That would generate savings on conformity assessment costs.

As Ukraine has made progress on the first element, the country’s readiness to conclude an ACAA has become more topical. Upon Ukraine’s request, an EU expert mission for a preliminary assessment of Ukraine’s TBT alignment progress was launched in October 2020,¹ with first results delivered in May 2021.

This policy study aims to contribute to the discussion about ACAA by:

- Explaining the concept and procedures underlying ACAA
- Summarising Ukraine’s progress in legal and institutional alignment
- Analysing the expected impact on trade

The rest of the policy study is structured as follows. Section 2 focuses on the underlying concept, explaining what an ACAA is and how the foreseen implementation in Ukraine would differ from other mutual recognition agreements. Section 3 summarises the available information on Ukraine’s progress towards ACAA, especially regarding the legal and institutional preparations. Section 4 overviews the role of the ACAA-covered products in Ukraine’s trade with the EU. Section 5 is devoted to quantitative analysis of the impact of ACAA on Ukraine.

¹ See: <https://www.consilium.europa.eu/en/press/press-releases/2020/10/06/joint-statement-following-the-22nd-eu-ukraine-summit-6-octobre-2020/>

2 The concept of ACAA

2.1 The EU mutual recognition agreements

An Agreement on Conformity Assessment and Acceptance of industrial products (ACAA) is a special case of mutual recognition agreements of conformity assessment (MRAs) offered by the EU to its partners.

In general, MRAs are bilateral agreements aimed at reducing non-tariff barriers in industrial goods trade. They consist of mutual recognition of conformity assessment results performed by the designated conformity assessment bodies in the partner's country of goods' compliance with the requirements of the other partner. Thereby, MRAs reduce trade costs by removing the need to carry out duplicative conformity assessments in the partner countries.

Standard MRAs do not require harmonisation of legal safety requirements and institutional set-up in partner countries. Instead, the recognition is grounded on a high level of mutual trust in the institutional strength of the partners. As a result, the MRAs are most typical among high-income countries with strong institutions. The EU has concluded such agreements with the USA, Japan, Canada, Australia, New Zealand, Switzerland and Israel (see Annex 1 for their coverage).²

An ACAA is a very special type of MRAs applied by the EU. Unlike the usual MRAs, the ACAA is based on aligning the partner country's legislative system and quality infrastructure with those of the EU. On the one hand, it means that the preparation for the ACAA is much more cumbersome than for the usual MRA. On the other, this alignment provides an additional guarantee for the high reliability of the conformity assessment procedures. It thus opens the door for MRAs with a wider arrange of countries.

So far, the EU has only one concluded ACAA with Israel. It entered into force in 2013.³ The agreement covers pharmaceutical products: medicinal products, active pharmaceutical ingredients, pharmaceutical excipients or mixtures thereof, for human or veterinary use. The ACAA envisages the recognition of each other's certification of conformity of batches without re-testing at import.⁴

Over the past decade, the EU offered the opportunity to conclude the ACAA to many other neighbouring countries, including Ukraine, Georgia, and Moldova in the framework of the Association Agreements, and to Mediterranean countries like Tunisia⁵, Morocco, Jordan and Egypt.⁶ However, progress in preparations has been slow in many of them.

Thus, the future ACAA with Ukraine could become the first ACAA concluded by the EU with a middle-income country. It is a very ambitious plan that underlines the special character of the EU-Ukraine bilateral relations.

² See: https://ec.europa.eu/growth/single-market/goods/international-aspects/mutual-recognition-agreements_en

³ See: https://ec.europa.eu/health/sites/health/files/files/international/2013_qa_israel-eu.pdf

⁴ See: https://www.qp-association.eu/qpag_mra_acaa.html

⁵ See: https://ec.europa.eu/commission/presscorner/detail/en/MEMO_12_166

⁶ See:

https://www.accredia.it/app/uploads/2013/06/4069_Workshop_UE_26_06_2013_4_The_context_of_the_ACAA_Agreement_Evelyne_Hania_EC.pdf.

2.2 The future EU-Ukraine ACAA

Although the ACAA is currently not a part of the Association Agreement between Ukraine and the EU, Art.57.1 foresees that it can be added as a Protocol to the Agreement later (see Box 1). This step requires the confirmation that Ukrainian legislation, standards and infrastructure are aligned with the relevant EU legislation and infrastructure.

Box 1. Article 57 “Agreement on Conformity Assessment and Acceptance of Industrial Products”

1. The Parties agree to add an ACAA as a Protocol to this Agreement, covering one or more sectors listed in Annex III to this Agreement once they have agreed that the relevant Ukrainian sectoral and horizontal legislation, institutions and standards have been fully aligned with those of the EU.
2. The ACAA will provide that trade between the Parties in goods in the sectors that it covers shall take place under the same conditions as those applying to trade in such goods between the Member States of the European Union.
3. Following a check by the EU Party and agreement on the state of alignment of relevant Ukrainian technical legislation, standards and infrastructure, the ACAA shall be added as a Protocol to this Agreement by agreement between the Parties according to the procedure for amending this Agreement, covering such sectors from the list in Annex III to this Agreement as are considered to be aligned. It is intended that the ACAA will ultimately be extended to cover all the sectors listed in Annex III to this Agreement, in accordance with the aforementioned procedure.
4. Once the sectors on the list have been covered by the ACAA, the Parties, by mutual agreement and in accordance with the procedure for amending this Agreement, undertake to consider extending its scope to cover other industrial sectors.
5. Until a product is covered under the ACAA, the relevant existing legislation of the Parties shall apply to it, taking into account the provisions of the TBT Agreement.

Source: Art. 57 in Chapter 3 “Technical barriers to trade” of Title IV “Trade and related matters”, the Association Agreement between the EU and Ukraine

Annex III⁷ to the Association Agreement contains 27 product categories (sectors)⁸ earmarked for the ACAA (see Table 1). That largely corresponds to the EU harmonised sectoral directives and regulations establishing the safety requirements under the so-called New Legislative Framework.⁹ However, the list of technical regulations applied in the EU is wider, and even the AA contains other technical regulations, for example, on eco-design, in other annexes. The pre-assessment expert mission explicitly suggested including eco-design requirements to the ACAA scope. Therefore, we expect the ACAA expanding over the Annex III list.

⁷ Unlike for other AA annexes, Annex III does not contain exact directives or regulations for approximation, but simply names product categories. Thereby, a dynamic alignment with the changing EU legislation in the TBT sphere does not necessarily require updating Annex III. It is important, as since the conclusion of the AA talks in 2011, the EU has updated most of its sectoral directives and regulations.

⁸ These product categories (sectors) are not mutually exclusive, and safety requirements for one product can be covered by multiple directives. For instance, low voltage equipment and electromagnetic compatibility directives are applied to electronic products in addition to machinery directive.

⁹ The New Legislative Framework is a set of the EU legislation adopted in 2008 with the aim to improve market surveillance and conformity assessment procedures in the EU, clarify the meaning of the CE marking, establishing a common legal framework for industrial products. See: https://ec.europa.eu/growth/single-market/goods/new-legislative-framework_en

Table 1: Annex III list of product categories (sectors) and the timeframe of approximation

No.	Product group	Timeline for alignment (end year for alignment)
1	Appliances burning gaseous fuels	2 years (2017)
2	Cableways	3 years (2018)
3	Construction products	2020
4	Diagnostic medical devices	3 years (2018)
5	Electromagnetic compatibility	2 years (2017)
6	Equipment for explosive atmospheres	3 years (2018)
7	Explosives for civil use	3 years (2018)
8	High-speed railways	5 years (2020)
9	Hot-water boilers	2 years (2017)
10	Implantable medical devices	3 years (2018)
11	Labelling of energy consumption	5 years (2020)
12	Lifts	2 years (2017)
13	Low-voltage equipment	2 years (2017)
14	Machinery	2 years (2017)
15	Marine equipment	2 years (2017)
16	Measuring instruments	5 years (2020)
17	Medical devices	3 years (2018)
18	Packaging	3 years (2018)
19	Personal protective equipment	2 years (2017)
20	Pressure equipment	3 years (2018)
21	Radio & telecomm terminals	4 years (2019)
22	Recreational crafts	4 years (2019)
23	Refrigerators, freezers	2 years (2017)
24	Simple pressure vessels	2 years (2017)
25	Safety of toys	2 years (2017)
26	Transportable pressure equipment	2 years (2017)
27	Weighing machines	3 years (2018)

Source: the Association Agreement between the EU and Ukraine

The ACAA will include a framework agreement, providing the recognition of equivalence of the conformity assessment, verification and accreditation procedures, and annexes setting out the products covered.¹⁰ Therefore, the conclusion of the first ACAA, containing the framework agreement, is crucial as the institutional processes are essentially cleared.¹¹

It is foreseen that the first three product categories (sectors) covered by the ACAA will be machinery, electromagnetic compatibility (EMC) and low voltage equipment (see Box 2), while more categories are to be added at a later stage. The pre-assessment expert mission recommended expanding the scope of the first ACAA to ensure that its full potential is utilised.¹²

¹⁰ Emerson M., Movchan V. (ed.) "Deepening EU-Ukrainian Relations: What, why and how?" Second edition. See: <https://3dcftas.eu/publications/deepening-eu-ukrainian-relations-what-why-and-how-2>

¹¹ The monitoring of ongoing compliance is embedded in the EU MRAs, and we expect to see it also in the EU-Ukraine ACAA.

¹² <https://www.kmu.gov.ua/news/poperednya-ocinohna-misiya-yes-predstavila-zvit-shchodo-gotovnosti-ukrayini-do-ukladannya-promislovogo-bezvizu>

Box 2: Product coverage of the three directives agreed for the first ACAA

Directive 2014/30/EU: Electromagnetic compatibility (EMC)

The EMC directive applies to electric and electronic appliances presenting the following characteristics: They may generate or contribute to electromagnetic emissions, which exceed a level allowing radio and telecommunication equipment and other equipment to operate as intended. Alternatively, their functioning generates unacceptable degradation in the presence of the electromagnetic disturbance normally consequent upon their intended use.

The directive does not apply to products where the EMC aspect is covered by other specific directives (e.g. medical devices, radio and telecommunication terminal equipment, and automotive vehicles) or regulations (aeronautical and marine radio products, parts and appliances, radio equipment used by radio amateurs)

Directive 2006/42/EC: Machinery

The machinery directive applies to the following products: machinery and partly completed machinery; interchangeable equipment; safety components; lifting accessories; chains, ropes and webbing; removable mechanical transmission devices. The examples of products covered by the directive are washing machines, e-bikes, presses, wheel loaders etc.

Some machinery is exempted from the scope of machinery directive as other directives cover them. Examples of exemptions include household appliances for domestic use, ordinary office machines (e.g. printers), electric motors, high-voltage electrical equipment such as switchgear etc.

Directive 2014/35/EU: Low-voltage equipment

The directive covers electrical equipment (including some components intended for incorporation into other equipment) designed to use a voltage rating: between 50 and 1000 V for alternating current; between 75 and 1500 V for direct current. In particular, products such as electrical appliances, lighting equipment, electric wiring, appliance couplers and cord sets, or electrical installation equipment.

Source: UNCTAD (2017), TRAINS NTMs: The Global Database on Non-Tariff Measures (<https://trains.unctad.org/>), <https://www.compliancegate.com/machinery-directive-product-list/>

Conclusion: The ACAA is a further step toward integrating Ukraine and the EU to foster bilateral trade and an important signal and symbol for Ukraine's commitment to ever closer ties with the EU and the implementation of EU-equivalent standards throughout its economy.

3 Where does Ukraine stand

3.1 The process of preparation for the ACAA

To conclude the ACAA, Ukraine has to align its relevant horizontal (cross-sectoral) and vertical (sectoral) legislation with the EU *acquis* and ensure that an EU-equivalent quality control infrastructure is in place. The EU then has to check and confirm that.

Roughly, Ukraine's preparations for the ACAA could be divided into the following steps:

Step 1: Ukraine aligns its legislation and reforms its quality control infrastructure according to the EU norms and practices.

Step 2: EU expert mission(s) reviews Ukraine's progress and provides recommendations on achieving full alignment.

Step 3: Ukraine implements the recommendations with the EU experts to ensure full alignment. *Steps 2 and 3 can be repeated until full alignment is achieved.*

Step 4: The EU conducts an official assessment and decides about Ukraine's readiness for the ACAA, covering certain product categories.

Step 5: The EU and Ukraine formally negotiate and conclude the ACAA.

Currently, Ukraine and the EU are at Step 2. A pre-assessment mission from the EU was foreseen for spring 2020 but was postponed because of COVID-19. The first component of the mission devoted to the legislative assessment started in October 2020, and its report was delivered in May 2021. Then, several on-site visits to Ukraine are expected to assess institutions and infrastructure. The conclusions of the pre-assessment mission forms the EU position regarding where Ukraine stands now in terms of the ACAA preparations and how to proceed further. Below, we summarise the key elements of this process and steps that Ukraine did so far.

3.2 Alignment of legislation

The areas for legal alignment have been defined in Annex III and cover horizontal and vertical legislation:

The horizontal legislation covers the following areas:

- A common framework for the marketing of products (Decision 768/2008/EC)
- Standardisation (Regulation (EU) 1025/2012)
- Requirements for accreditation and market surveillance (Regulation (EC) 765/2008)¹³
- General product safety (Directive 2001/95/EEC)
- Liability for defective products (Directive 85/374/EEC)
- Units of measurement (Council Directive 80/181/EEC)¹⁴

It aims to ensure the general approaches for non-food product safety in the country and thus is highly relevant for the 'framework part' of the ACAA.

Besides, for the conclusion of the ACAA covering the three predefined product categories (sectors), the alignment is needed with the following:

¹³ Since 16 July 2021, the EU launched the new Regulation (EU) 2019/1020 strengthening the EU market surveillance. The Union Product Compliance Network (UPCN) aimed at centralizing market surveillance enforcement and compliance data from all EU member states was launched on 1 January 2021.

¹⁴ The latest amendments: Directive (EU) 2019/1258

- Directive 2014/30/EU: Electromagnetic compatibility
- Directive 2006/42/EC: Machinery
- Directive 2014/35/EU: Low-voltage equipment

In 2020, Ukraine completed the revision of its horizontal legislation, thereby completing the alleged alignment with EU acquis. The three sectoral directives were also embedded into the Ukrainian legislation by the Cabinet of Ministries Decrees.

As a next stage, this alignment was verified by the EU expert mission. Their task was to conclude whether any further legal changes are needed and what exactly has to be changed. The mission's final report was formally presented in early May 2021.¹⁵ The EU experts assessed the legislation alignment as quite advanced but requiring some further changes, including in the secondary legislation. The experts also recommended improving tables of concordances and translation. These changes can be implemented in parallel with the assessment of Ukraine's quality control infrastructure.

3.3 The soundness of quality infrastructure

Ukraine committed to achieving conformity with the EU procedures in the following five areas of quality infrastructure:

- Standardisation (development and adoption of voluntary standards)
- Metrology (ensuring the proper use of measurement units);
- Accreditation (accrediting conformity assessment bodies);
- Conformity assessment (assessing the compliance with product safety requirements);
- Market surveillance (conducting market oversight).

Ukraine has already implemented extensive reforms to align its quality infrastructure framework with the respective EU norms and practices. Below, we highlight key changes in each area since 2014.

Standardisation

In line with its AA commitments, Ukraine has gradually transposed the corpus of EU standards into its national standards. Ukraine has already adopted the harmonised standards providing the presumption of conformity with the EU sectoral directives in the first three agreed ACAA categories. In parallel, Ukraine has withdrawn conflicting national standards. In particular, the Government abolished old GOSTs dated before 1992. These efforts allowed increasing the share of standards harmonised with international including the European ones from 30% in 2013 to 68% at the beginning of 2021. The entire set of Ukrainian standards is accessible online.

The National Standardisation Authority (NSA) was established in 2015. In line with the commitment to participate in the European and international organisations for standardisation, the NSA has joined the

¹⁵ <https://www.kmu.gov.ua/news/poperednya-ocinochna-misiya-yes-predstavila-zvit-shchodo-gotovnosti-ukrayini-do-ukladannya-promislovogo-bezvizu>

ISO and the IEN, and a companion in CEN¹⁶ and CENELEC,¹⁷ the European standardisation bodies. In 2018, the NSA established cooperation with ETSI, the European standardisation organisation in information and communications.

In standardisation, the main concerns are delays in the publication of already adopted standards, absent or incoherent translation of the European standards, short transition periods for adaptation to new standards, and the lack of professionals in the sphere of standardisation.¹⁸ While the expert mission recommended paying more attention to the quality of translation of laws and technical regulations relevant for the ACAA, more stringent requirements should be also applied to the translation of standards. Still, although these issues are important, they should not pose major obstacles for the ACAA.

Accreditation

In line with the AA commitments, the National Accreditation Agency of Ukraine (NAAU) is an associate member of the European Cooperation for Accreditation (EA). The NAAU is the signatory of the EA bilateral agreements (EA BLA) in calibration, testing, medical examination, management system certification, and certification of persons. That means that all EA members recognise and accept the equivalence of the operated accreditation systems, and the reliability of the conformity assessment results in areas covered by the EA BLAs under the principle “Accredited once, accepted everywhere”.¹⁹

However, from 24 March 2021, the NAAU status of the EA BLA signatory for Inspection and Product Certification was suspended.²⁰ The same day, the International Accreditation Forum suspected this NAAU status as well.²¹ That suggests institutional deficiencies of the NAAU. Moreover, it has negative implication for Ukrainian conformity assessment bodies, as the NAAU accreditation for inspection and product certification is not recognised internationally. For the ACAA, the restoration of the status is essential.

Metrology

Ukraine has revised the principles and institutional structure of metrological activity and aligned it with European and international norms. The new national metrology system has been developed based on norms and practices of the International Organization of Legal Metrology (OIML). In 2018, Ukraine became a member of the Metre Convention,²² and in 2020, it joined the OIML.²³ The development of the national metrology – as other quality infrastructure institutions in Ukraine – face financial and personnel qualification constraints.²⁴ However, they are not expected to threaten the conclusion of the ACAA.

¹⁶ See <https://standards.cen.eu/dyn/www/f?p=CENWEB:60:::NO:::>

¹⁷ See <https://www.cenelec.eu/dyn/www/f?p=web:161>.

¹⁸ Focus group on TBT reforms conducted in 2019 in the framework of the 3dcftas project (<https://3dcftas.eu/>)

¹⁹ See: <https://european-accreditation.org/mutual-recognition/the-ea-mla/>

²⁰ See: <https://european-accreditation.org/ea-members/directory-of-ea-members-and-mla-signatories/#UKRAINE>

²¹ See: https://www.iaf.nu/articles/IAF_MEM_Ukraine/502

²² See <https://www.bipm.org/en/about-us/member-states/ua/>.

²³ See: <https://zakon.rada.gov.ua/laws/show/998-IX#Text>

²⁴ Focus group on TBT reforms conducted in 2019 in the framework of the 3dcftas project (<https://3dcftas.eu/>)

Conformity assessment

The conformity assessment system received a major overhaul with the adoption of new legislation aligned with EU norms. Alongside, the mandatory certification of products, a Soviet legacy, was finally abolished in 2018. NAAU accredits the conformity assessment bodies (CABs). The notified CABs²⁵ register for specific technical regulations is available online at the website of the Ministry for Development of Economy, Trade and Agriculture.²⁶ As of January 2021, there were 108 public and private CABs in the register. The technical and personnel capacity of the CABs has been among the sector challenges,²⁷ though the development of private facilities allows partly relaxing these constraints.

The reliability of conformity assessment results is a necessary condition for the ACAA. It is expected that the EU expert mission will pay special attention to the capacities of the CABs, notified, i.e. designated to conduct the conformity assessment, for the three agreed product categories initially covered by the ACAA. The suspension of the NAAU signatory status for inspection and product certification created another challenge: Before the status is resumed, the CABs cannot get internationally recognised accreditation in this area in Ukraine.

Market surveillance

Market surveillance²⁸ has been the newest element of the quality infrastructure in Ukraine. The State Service on Food Safety and Consumer Protection (SPSA), established in 2016, is the key responsible authority in this sphere, but not the only one. Among the three product categories initially covered by the ACAA, the SPSA will be accountable for electromagnetic compatibility and low voltage equipment surveillance. At the same time, the State Labour Service shall be responsible for the machinery.

Consultations with stakeholders highlighted that market surveillance remains one of the weakest elements of the quality infrastructure in Ukraine. It still requires significant investments in its technical and institutional capacity for alignment with EU procedures.

The new EU market surveillance regulation (MSR), enacted in July 2021, poses an additional challenge, as the Ukrainian market surveillance will need to follow, although with some time lag. The new EU MSR aims to strengthen information exchange and cooperation among the member states to pinpoint non-compliances quickly. The system's backbone is the Union Product Compliance Network (UPCN), launched in January 2021. Likely, the ACAA for Ukraine will eventually entail participation in the UPCN.

²⁵ A notified body is a conformity assessment body officially designated by the national authority to carry out the procedures for conformity assessment within the meaning of applicable EU harmonisation legislation. See: <https://ec.europa.eu/growth/tools-databases/nando/index.cfm?fuseaction=glossary.main>. The EU harmonisation legislation includes three directives selected for the first round of the EU-Ukraine ACAA

²⁶ See <https://www.me.gov.ua/Documents/Download?id=7aeb0218-3091-474a-aacd-325a88d440b1>

²⁷ Focus group on TBT reforms conducted in 2019 in the framework of the 3dcftas project (<https://3dcftas.eu/>)

²⁸ Market surveillance for product ensure that products on the market conform legally established safety requirements. It includes actions such as product withdrawals, recalls and the application of sanctions to stop the circulation of non-compliant products and/or bring them into compliance. See: https://ec.europa.eu/growth/single-market/goods/building-blocks/market-surveillance_en.

Conclusion: Ukraine has made important progress in aligning key legislation required for the ACAA conclusion, although some further fine-tuning will be needed. The assessment of Ukraine’s quality infrastructure is likely to reveal more challenges, especially in accreditation, conformity assessment and market surveillance. Special attention should be paid to renewing the National Accreditation Authority status of the bilateral agreement signatory with the European Cooperation for Accreditation for inspection and product certification.

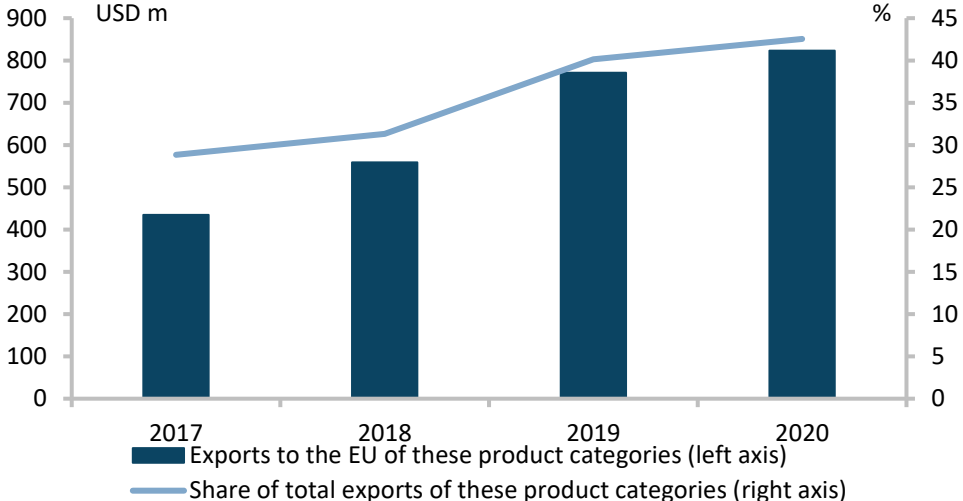
4 The role of the ACAA-covered products in Ukraine trade with the EU

The first round of the ACAA is expected to cover three EU Directives: machinery, low voltage equipment and electromagnetic compatibility. We will focus our impact analysis of them (see Annex 2 for details for product coverage). Here, we use the term ‘ACAA-covered’ exports to describe exports of products covered by these three directives only.

4.1 Ukraine’s exports

The ACAA-covered products play a moderate role in correct Ukraine’s current to the EU. In 2020, Ukraine’s exports²⁹ of products belonging to three agreed ACAA categories to the EU were USD 823 m (Figure 1) or 5% of Ukraine’s exports to the EU. However, these exports grew steadily over the last four years, including even 2020, when the Covid-19 related restrictions resulted in the drop of overall exports to the EU. In 2017-2020, these products exports to the EU increased by 89%. As exports to other destinations remained flat, the share of the EU reached 43% in 2020 compared to 29% in 2017. Other important destinations for these products are the CIS countries, especially Russia and Belarus, and China.

Figure 1: Ukraine’s exports of ACAA-covered products to the EU



Source: State Customs Service of Ukraine; note: does not include re-exports

²⁹ In this study, we do not consider re-exports (see Annex 2 for details).

In 2020, Ukraine exported to the EU 80%³⁰ of the ACAA-covered HS sub-headings that it supplied globally, suggesting that the conformity assessment costs paid to enter the EU market do not halt trade. Still, that constitutes less than two-thirds of all ACAA-covered HS sub-headings. Exports are skewed towards several key products. Wiring sets of a kind used in vehicles, aircraft and ships amount to 18% of Ukraine’s exports, heading the list of top-10 products belonging to three agreed ACAA categories (Table 2). Other important exported products include boards and panels for electric control, washing machines, electric lamps, accumulators, and several devices. For most top-10 products, the EU is the key destination of Ukraine’s exports, including being the only destination for shipments of wiring sets and almost the only one for electric lamps and light fittings.

Table 2: Top-10 products belonging to Ukraine’s ACAA-covered exports to the EU

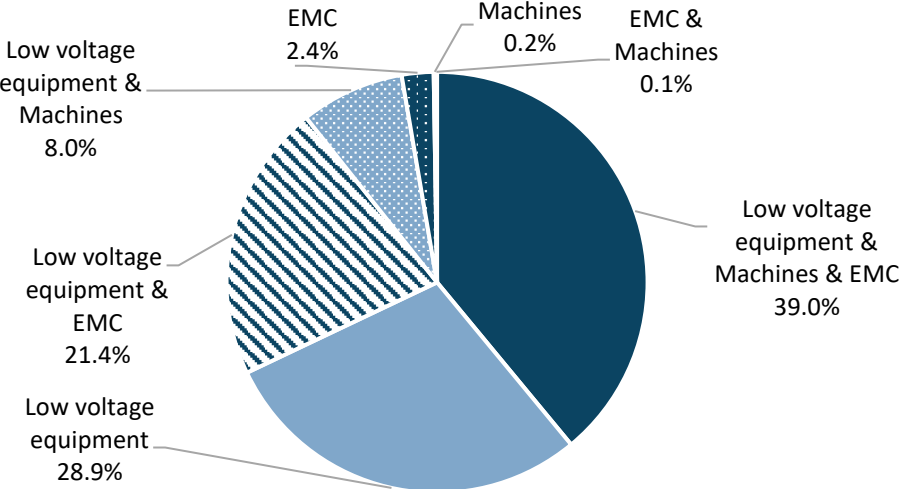
HS	Description	Coverage	Exports to the EU, USD m	Share in exports to EU, %	Share of EU in total exports, %
854430	Ignition wiring sets and other wiring sets of a kind used in vehicles, aircraft or ships	LVT	146	18	100
853710	Boards, panels for electric control for a voltage < 1000 volts	LVT, EMC	44	5	73
845011	Washing machines, fully-automatic	LVT, MCN, EMC	34	4	69
940540	Electric lamps and light fittings	LVT, EMC	28	3	90
854449	Insulated electric conductors; for a voltage < 1000 volts	LVT	26	3	48
845530	Metal-rolling mills; rolls thereof	LVT, MCN, EMC	26	3	39
850710	Electric accumulators; lead-acid, of a kind used for starting piston engines	LVT	25	3	56
847420	Machines; for crushing or grinding earth, stone, ores	LVT, MCN, EMC	25	3	68
841451	Fans with a self-contained electric motor of an output < 125W	LVT, MCN	25	3	62
841850	Furniture incorporating refrigerating or freezing equipment	LVT, MCN, EMC	20	2	65

Source: State Customs Service of Ukraine, own estimates; LVT – Low voltage equipment, MCN – machinery, EMC – electromagnetic compatibility

Most of Ukraine’s ACAA-covered exports to the EU are subject to multiple directives. In 2020, 39% of these exports required conformity with all three directives designated for the first ACAA (Figure 2). Another 29% were subject to safety requirements of two directives, primarily low voltage equipment and EMC directives. Just about one-third of exports are subject to one out of three earmarked directives.

³⁰ The number of HS 6-digit codes (sub-headings) in exports is counted for exports over USD 10,000.

Figure 2: The structure of Ukraine’s ACAA-covered exports to the EU, by directives’ coverage, %



Source: State Customs Service of Ukraine, own estimates, does not include re-exports

However, even in this case, these products are most likely subject to at least one other EU technical regulation, not included in the current ACAA. According to our estimates, 94% of exports belonging to three agreed ACAA categories are also subject to other directives, particularly on the use of hazardous substances in electrical and electronic equipment, on equipment and protective systems intended for use in a potentially explosive environment and on radio equipment.

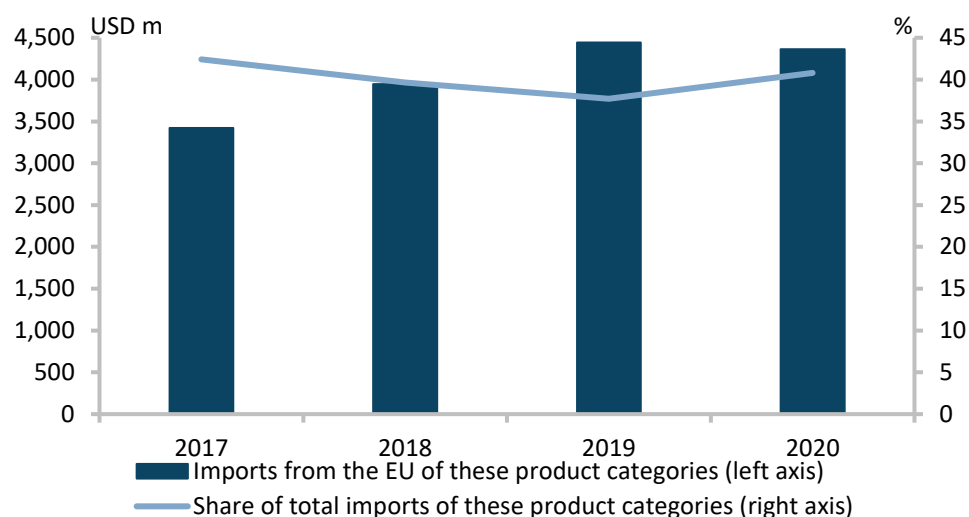
Conclusion: The EU has been the largest destination of Ukraine’s exports of the ACAA-covered products, accounting for 43% of all ACAA-covered product shipments in 2020 compared to 29% in 2017. Still, these exports play a moderate role in Ukraine’s exports to the EU, constituting only 5% of the total. Although the country supplies to the EU most products it ships globally, exports are concentrated to few products like wiring sets and control boards.

4.2 Ukraine’s imports

The role of ACAA-covered products in Ukraine’s imports from the EU is much more prominent. In 2020, Ukraine imported USD 4.4 bn of these goods from the EU (Figure 3), constituting ca. 20% of total imports from the EU.³¹ Unlike exports, the importance of the EU in Ukraine’s total imports of the ACAA-covered products remained stable over 2017-2020, fluctuating around 40% of the total. In 2020, imports dropped by a mere 2%, breaking the upward trend of the previous years. Still, in 2020, the imports from the EU were 28% more than in 2017. China is the second-largest source of imports for these products.

³¹ In the study, we consider imports reported as released to free circulation (see Annex 2 for details).

Figure 3: Ukraine's imports of ACAA-covered products from the EU



Source: State Customs Service of Ukraine, for imports released into free circulation

Ukraine's imports of the ACAA-covered categories from the EU are much more diversified than exports, covering 88% of all ACAA-covered HS sub-headings³². Top-10 import products constituted 21% of total imports of these products from the EU, while this share was almost half for exports. Wind-powered electric generators are the largest of Ukraine's import product accounting for USD 202 m and 5%. Other important import categories are various machinery – for agriculture, public works, filling bottles and cans, etc. Therefore, the ACAA covers many investment goods.

Table 3: Top-10 products belonging to Ukraine's ACAA-covered imports from the EU

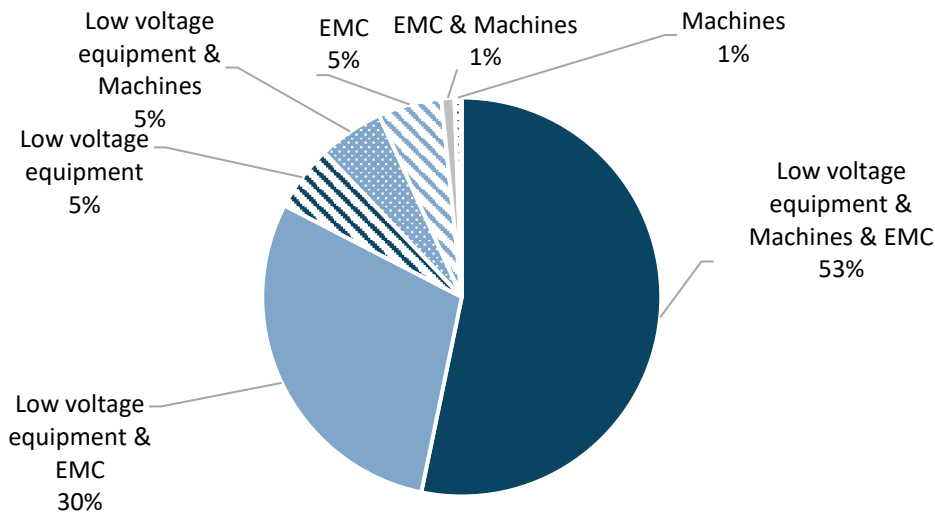
HS	Description	Coverage	Imports from the EU, USD m	Share in imports from EU, %	Share of EU in total imports, %
850231	Electric generating sets; wind-powered	LVT, EMC	202	5	75
852872	Reception apparatus for television	LVT, EMC	140	3	51
843351	Combined harvester-threshers	LVT, MCN, EMC	132	3	85
853710	Boards, panels, for electric control, for a voltage < 1000 volts	LVT, EMC	75	2	69
901890	Medical, surgical, dental instrument	EMC	68	2	39
847910	Machinery for public works, building or the like	LVT, MCN, EMC	62	1	91
842230	Machinery for filling, closing, sealing, capsuling or labelling bottles, cans	LVT, MCN, EMC	62	1	82
841810	Combined refrigerator-freezers, fitted with separate external doors	LVT, MCN, EMC	62	1	38
842720	Fork-lift and other works trucks	LVT, MCN, EMC	61	1	82
843149	Parts of machines handling earth, minerals or ores	LVT, MCN, EMC	59	1	81

Source: State Customs Service of Ukraine, own estimates; LVT – Low voltage equipment, MCN – machinery, EMC – electromagnetic compatibility

³² The number of HS 6-digit codes (sub-headings) in imports is counted for imports over USD 10,000

Most of Ukraine’s ACAA-covered imports are subject to two or three ACAA directives, with even higher overlapping coverage than exports.

Figure 4: The structure of Ukraine’s ACAA-covered imports from the EU, by directives’ coverage



Source: State Customs Service of Ukraine, for imports released into free circulation

In 2020, 53% of Ukraine’s imports constituted products subordinated to safety rules of all three directives – low voltage equipment, machines and EMC. The share of products covered by only one directive belonging to the first ACAA round was 11%. As in the case of exports, these products have been subject to other technical regulations as well.

Conclusion: The role of the ACAA-covered products in imports is much more prominent. In 2020, they accounted for 20% of total imports from the EU. The shipments were diversified, with the top-10 products accounting for only one-fifth of the total, with wind power generators being the largest import category. As in the case of exports, the EU is the main trade partner of Ukraine, supplying over 40% of the ACAA-covered products to the country.

5 The economic implications of the EU-Ukraine ACAA

5.1 Expected implications of the ACAA: method of analysis

The conclusion of the ACAA will have a direct effect on Ukraine’s trade with the EU. International experience shows that mutual recognition agreements (MRAs), to which the ACAA belongs³³, intensify trade flows³⁴ by lowering regulatory compliance costs and thus improving market access. The ACAA removes the requirement for additional conformity assessments in the destination country by the mutual recognition of the partners’ certificates: the Ukrainian certificates will be recognised in the EU,

³³ Regretfully, we did not find any ex-post assessment of the economic impact of the EU-Israel ACAA.

³⁴ Correia de Brito, A., C. Kauffmann and J. Pelkmans (2016), “The contribution of mutual recognition to international regulatory co-operation”, OECD Regulatory Policy Working Papers, No. 2, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jm56fqsfxmx-en>

while the EU certificates – in Ukraine. That should save time and money and reduce the regulatory risks for exporters and importers, thereby creating conditions for trade expansion.

We analyse the impact of the ACAA on trade with the EU in two steps. First, we estimate the additional conformity assessment costs based on information about the need for third-party conformity assessment to verify compliance with the safety requirements in the EU and Ukraine, companies' spending on this conformity assessment and the number of the product covered (see Annex 3.1 for the detailed review of the methodology). Second, we use the partial equilibrium methodology to estimate the impact of lower trade costs generated by the ACAA on Ukraine's exports and imports from the EU (see Annex 3.2 for the modelling methodology).

International studies suggest³⁵ that the direct ACAA impact on trade could be small. However, this impact might not be the main part of the story, as other important – although not easily quantifiable – consequences exist. The MRAs tend to generate new trade flows, including those of smaller companies,³⁶ for which additional conformity assessment served as market access deterrents. The MRAs are also important for introducing new innovative products with a short technological life span as these products suffer from approval delays³⁷. The higher level of trade integration, including standards harmonisation and mutual recognition of conformity assessment results, is considered an important factor for developing global value chains³⁸.

Therefore, we complement quantitative assessments with the qualitative analysis of other important expected consequences of the ACAA. The analysis is based on the survey results, interviews with stakeholders and international experience.

5.2 Trade costs of the ACAA

Two key questions for understanding the ACAA costs are how often exporters and importers need the third-party conformity assessments and how costly they are. Asked about conformity requirement, the vast majority of companies mentioned the condition of the issuance of a declaration of conformity, usually with the third-party assessment. Almost no companies say that no declaration of conformity is required for trading between the EU and Ukraine.

Among the respondents, ca. 71% of exporters and 94% of importers stated that they need the third-party conformity assessment to issue the declaration of conformity. Only a few exporting companies have indicated only issuing a declaration of conformity and not using third-party assessment, suggesting that only a small share of their trade does not need third-party assessment. Thus, this result highlights that double certification concerns most industrial products between the EU and Ukraine.

³⁵ Vancauteren M. (2010) Trade effects of approaches intended to facilitate acceptance of results of conformity assessment: What is the evidence? <https://bit.ly/3eAGpD5>; Correia de Brito, A., C. Kauffmann and J. Pelkmans (2016), https://www.oecd.org/regreform/WP2_Contribution-of-mutual-recognition-to-IRC.pdf

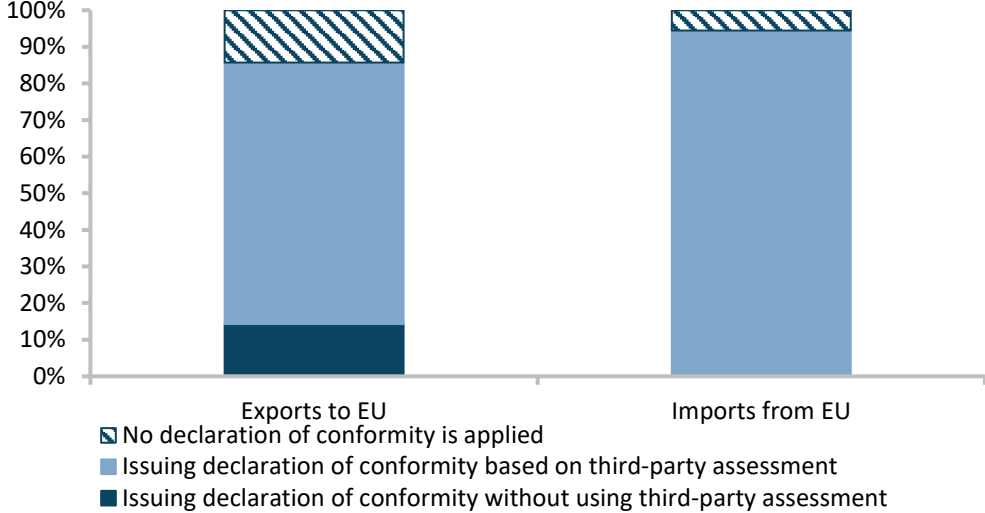
³⁶ UNCTAD (2013) Implications of global value chains for trade, investment, development and jobs. https://unctad.org/system/files/official-document/unctad_oecd_wto_2013d1_en.pdf

³⁷ Vancauteren M. (2010) Trade effects of approaches intended to facilitate acceptance of results of conformity assessment: What is the evidence? <https://bit.ly/3eAGpD5>

³⁸ <http://www.krinstitute.org/assets/contentMS/img/template/editor/3%20GVC.pdf>

Responding companies also often mentioned that third-party assessment is required for final products. It was noted less often for intermediate products on the export side (Ukrainian companies exporting to the EU) and import side (EU-companies exporting to Ukraine). The importance of the third-party conformity assessment for issuing declaration of conformity was further re-confirmed by interviews.

Figure 5: Form of declaration: exports and imports to and from the EU

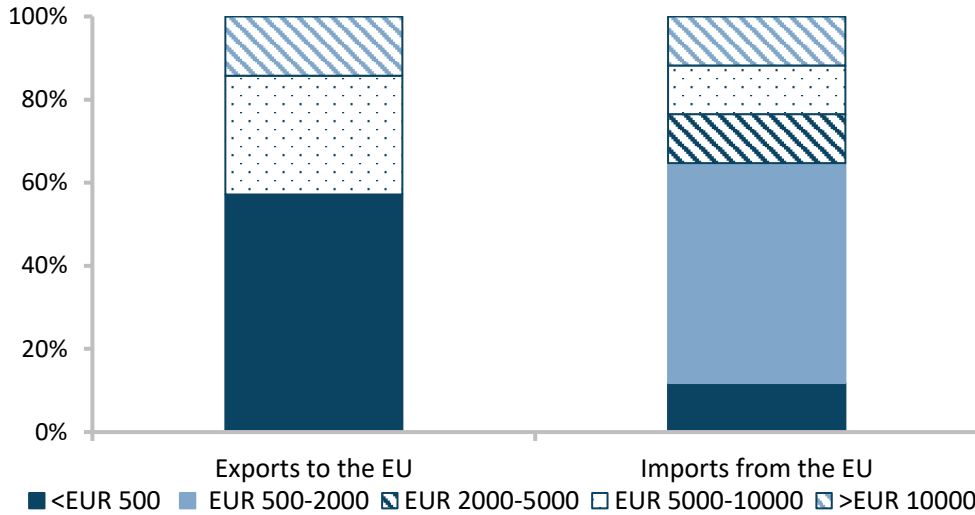


Source: Own survey, note: participants not responding to this question are excluded. The declaration of conformity can be issued based on a producer’s self-assessment or the third-party conformity assessment. Survey participants were asked whether they issue a declaration of conformity for export to or imports from the EU and whether they use third-party conformity assessment for export to or imports from the EU. Based on their answers, the frequency of using the third-party assessment for the declaration of conformity was estimated.

The median cost reported by companies is EUR 5,000 – 10,000³⁹ on the export side and between EUR 2,000 and EUR 5,000 on the import side for one certificate. The companies have also emphasised further recurring though much smaller costs for certificate review. Therefore, companies trading between Ukraine and the EU face significant transaction costs for double certification, which reduce their profits.

³⁹ The similar cost range has been reported by open sources, for instance: <https://www.emctech.com.au/faq/#FAQ-cost>. In multiple cases, much wider range from several hundred to tens of thousand dollars is reported arguing that the exact cost is very product-sensitive.

Figure 6: Financial costs for conformity assessment: exports and imports to and from the EU



Source: Own survey, note: survey participants representing automotive, machines, electrical equipment and mechanisms and interviewees are included

We estimated additional trade costs generated by the double conformity assessment (Table 4). For exports to the EU, the further conformity assessment costs USD 41 m equivalent to ca. 4.9% of additional ad-valorem duty on Ukraine’s exports to the EU for these products. For imports, total additional costs are considerably higher in nominal terms, amounting to USD 103 m. However, the ad-valorem equivalent of these barriers is lower at 2.3% of Ukraine’s imports of the ACAA-covered products from the EU. These costs can be eliminated by the ACAA conclusion, providing a new impetus for trade growth.

Table 4: Additional trade costs associated with the double conformity assessment

Description	Exports	Imports
Trade costs, USD m	40.6	103.0
Ad valorem equivalent of trade costs, %	4.93%	2.36%

Source: own estimates, note: ad valorem equivalent of trade costs is estimated by dividing trade costs by the respective value of trade flow with the EU

5.3 The impact of the ACAA on trade with the EU

The conclusion of the ACAA will have a small short-term impact on Ukraine’s current exports. The elimination of the additional conformity costs will result in a +USD 27.5 m or 0.2% increase in total exports to the EU, equivalent to a 3.3% increase in the ACAA-covered exports to the EU. The producers of electric motors and generators, press machines and electric generating sets will gain the most. However, the distribution of gains will be quite broad across all ACAA-covered products.

Table 5: The impact of the ACAA on Ukraine’s exports to the EU

HS	Description	Coverage	Impact, USD m	Impact, % growth	Exports to the EU, 2020, USD m
850300	Electric motors and generators; parts for machines of HS 8501 or 8502	LVT, EMC	2.2	109.5%	2.0
847930	Presses for the manufacture of building board of wood	LVT, MCN, EMC	1.3	413.6%	0.3
850220	Electric generating sets; with spark-ignition internal combustion piston engines	LVT, EMC	0.7	216.1%	0.3
842139	Machinery for filtering or purifying gases	LVT, MCN, EMC	0.7	30.4%	2.2
841989	Machinery, plant and laboratory equipment for treating materials by change of temperature	LVT, MCN, EMC	0.6	20.7%	3.0
841459	Fans	LVT, MCN	0.6	9.9%	5.8
842199	Machinery parts for filtering or purifying liquids or gases	LVT, MCN, EMC	0.5	27.9%	2.0
854370	Electrical machines and apparatus having individual functions	LVT, MCN, EMC	0.5	80.0%	0.7
842123	filtering or purifying machinery for internal combustion engines	LVT, MCN, EMC	0.5	31.4%	1.5
841480	Pumps and compressors for air, vacuum or gas	LVT, MCN	0.4	3.6%	11.6
	Other products		19.4	2.4%	794.1
	Total		27.5	3.3%	823.4

Source: own estimates; LVT – Low voltage equipment, MCN – machinery, EMC – electromagnetic compatibility

The model shows the largest nominal expansion in import machinery for filtering and purifying gas, oil or petroleum filters, chandeliers, and other electric light fittings. In dollar terms, the ACAA will have a larger impact on imports from the EU, increasing by USD 109.7 m. However, it will still be small, accounting for 0.5% of total imports from the EU and 2.5% of the imports of the ACAA-covered products.

Table 6: The impact of the ACAA on Ukraine’s imports from the EU

HS	Description	Coverage	Impact, USD m	Impact, % growth	Imports from the EU, 2020, USD m
842139	Machinery for filtering or purifying gases	LVT, MCN, EMC	3.4	9.6%	35.6
842123	Filtering or purifying machinery, oil or petrol filters for internal combustion engines	LVT, MCN, EMC	2.7	7.8%	34.5
940510	Chandeliers and other electric ceiling or wall light fittings	LVT, EMC	2.6	31.0%	8.3
853650	Electrical apparatus switches, for a voltage < 1000 volts	LVT, EMC	2.3	14.9%	15.3
850140	Electric motors; AC motors, single-phase	LVT, EMC	2.2	78.3%	2.8
842199	Parts for filtering or purifying liquids or gases	LVT, MCN, EMC	2.0	17.5%	11.5
853710	Boards for electric control for a voltage < 1000 volts	LVT, EMC	2.0	2.7%	74.7
854370	Electrical machines and apparatus; having individual functions	LVT, MCN, EMC	1.6	19.4%	8.4
902519	Thermometers and pyrometers	LVT, EMC	1.5	17.4%	8.8
903180	Instruments, appliances and machines; for measuring or checking	LVT, EMC	1.5	9.9%	15.0
	Other		87.9	2.1%	4,150.1
	Total		109.7	2.5%	4,365.0

Source: own estimates; LVT – Low voltage equipment, MCN – machinery, EMC – electromagnetic compatibility

5.4 Other effects of the ACAA

As discussed above, savings on the conformity assessment costs are expected to generate positive but small gains for trade in goods, which are already traded between Ukraine and the EU. But these gains are only a relatively small part of the wider range of the ACAA economic effects for Ukraine.

The additional gains for the current trade will come from the reduction in regulatory risks and bureaucracy. We asked the companies to comment on the possible effect ACAA might have on their business activities in the EU and Ukraine. They responded that ACAA would reduce financial and bureaucratic costs, accelerate trade volumes, and positively influence product placement in both directions. Overall, they strongly supported a possible agreement and highlighted the cost-saving impact.

The ACAA can contribute to trade in goods, which so far were not traded. As each affected product, e.g. a specific model of a machine manufactured by a specific manufacturer, requires a conformity assessment only once per several years (unless the good or its production process is changed), conformity assessments constitute a form of fixed costs for companies. Once a first good is sold to an export market, and the conformity assessment has been purchased/acquired, it will cover any further exports of this good to this market. By no longer requiring conformity assessments, the ACAA will unlock the trade of goods presently not traded between Ukraine and the EU.

Most likely, these goods are relatively specific goods that would only be traded in low quantity, such as specific machines and their spare parts, where the relation between the monetary and administrative costs of acquiring the conformity assessment and the expected margin is unfavourable. According to this logic, especially the imports of capital goods to Ukraine could be facilitated by ACAA.

Like trade in goods, not traded before, we can expect that new (smaller) companies start exporting after the ACAA reduces the fixed costs for entering markets. We can also expect faster placement of new innovative products on the market. These products will benefit from shortened time for compliance checks.

The ACAA also creates higher potential exports of relevant goods to other destinations using the EU-equivalent conformity as a strong selling point. The conclusion of the ACAA generates important image gains signalling to other trade partners that Ukraine has a reliable system for product safety. Coupled with relatively low production costs, this will make the Ukrainian products more competitive on other markets. Moreover, the ACAA with the EU could simplify the conclusion of other MRAs, providing an additional trade boost in the future.

Wider and cheaper imports of capital goods from the EU will mean more investments and higher productivity, contributing to Ukraine's economic growth. In 2020, the EU accounted for almost half of all Ukraine's imports of capital goods, largely covered by the ACAA.

The establishment of common standards and conformity assessment space between Ukraine and the EU for selected manufacturing goods creates a stimulus for higher FDI and a wider involvement of Ukraine's producers in the global value chains. If the cost of exporting technical goods to the EU is reduced, then the incentive to invest in Ukraine and export to the EU increases. That is the case for the automotive industry having an established cluster of automotive spare parts production in Ukraine. And it might be the case in other value chains. However, to be effective, this stimulus should be coupled with improving the overall business climate, particularly regarding the rule of law.

Finally, Ukraine's conformity assessment bodies (CABs) notified in the ACAA framework will gain a better reputation and become more competitive globally. That may create opportunities for regulatory arbitrage as these CABs could offer their services to other exporters to the EU. However, this opportunity will depend on whether and what rules of origin provisions are included in the ACAA.

Conclusion: The ACAA will have a wide range of economic effects for Ukraine. First, it will reduce trade costs for relevant products. It is estimated that costs savings will constitute 4.9% for exports and 2.3% for imports. That will result in a positive, although small, increase in trade with the EU. However, this is only a small part of the expected wider effects. The ACAA is expected to reduce regulatory risk and lower bureaucracy costs in trade, start trade in new products or new companies and contribute to the faster placement of new innovative products on the market. Ukraine's exports to other destination can expand thanks to image gains. Simultaneously, cheaper capital goods imports from the EU will have a positive effect on domestic investments, productivity and economic growth in general.

Annex 1: The list of the EU MRAs

Table A1: The list of the EU MRAs

Country	Type	Sector coverage
Australia	MRA	<ol style="list-style-type: none"> 1. Automotive products 2. Electromagnetic compatibility (EMC) 3. Low Voltage Equipment 4. Machinery 5. Medical Devices 6. Pressure Equipment 7. Telecommunications terminal equipment (TTE) 8. Good Manufacturing Practice (GMP)
Canada	MRA	<ol style="list-style-type: none"> 1. Electrical and electronic equipment, including electrical installations and appliances, and related components 2. Radio and telecommunications terminal equipment (R&TTE) 3. Electromagnetic compatibility (EMC) 4. Toys 5. Construction products 6. Machinery, including parts, components, including safety components, interchangeable equipment, and assemblies of machines 7. Measuring instruments 8. Hot-water boilers, including related appliances 9. Equipment, machines, apparatus, devices, control components, protection systems, safety devices, controlling devices and regulating devices, and related instrumentation and prevention and detection systems for use in potentially explosive atmospheres (ATEX equipment) 10. Equipment for use outdoors as it relates to noise emission in the environment 11. Recreational craft, including their components
Israel	MRA	<ol style="list-style-type: none"> 1. Good Laboratory Practice (GLP)
	ACAA	<ol style="list-style-type: none"> 1. Pharmaceutical products
Japan	MRA	<ol style="list-style-type: none"> 1. Electrical products 2. Radio and telecommunications terminal equipment (R&TTE) 3. Good Manufacturing Practice (GMP) 4. Good Laboratory Practice (GLP)
New Zealand	MRA	<ol style="list-style-type: none"> 1. Electromagnetic compatibility (EMC) 2. Low Voltage Equipment 3. Machinery 4. Medical Devices 5. Pressure Equipment 6. Telecommunications terminal equipment (TTE) 7. Good Manufacturing Practice (GMP)

Country	Type	Sector coverage
Switzerland	MRA	<ol style="list-style-type: none"> 1. Machinery 2. Personal Protective Equipment 3. Toys 4. Medical Devices 5. Gas appliances and boilers (Hot water boilers) 6. Pressure vessels 7. Radio Equipment and Telecommunication Terminal Equipment 8. Equipment and protective systems intended for use in potentially explosive atmospheres 9. Electrical equipment 10. Construction plant and equipment 11. Measuring instruments and pre-packages 12. Motor Vehicles 13. Agricultural and forestry tractors 14. Good Laboratory Practice (GLP) 15. Medicinal products, Good Manufacturing Practice (GMP), inspection batch and certification 16. Construction products 17. Lifts 18. Biocidal products 19. Cableways 20. Explosives for civil use
USA	MRA	<ol style="list-style-type: none"> 1. Electromagnetic compatibility (EMC) 2. Telecommunication Equipment 3. Marine Equipment

Sources: https://ec.europa.eu/growth/single-market/goods/international-aspects/mutual-recognition-agreements_en;
https://ec.europa.eu/health/sites/health/files/files/international/2013_qa_israel-eu.pdf

Annex 2: Data methodology

A2.1 The product coverage of the ACAA

We used the United Nations Conference on Trade and Development (UNCTAD) Global database on non-tariff measures (NTMs)⁴⁰ (UNCTAD TRAINS) to obtain the list of HS codes covering the three product categories agreed for the first round of the ACAA. As Ukraine has harmonised its technical regulations for these products with the EU norms, we used the list of the HS codes reported for the EU measures as the basis for the analysis.

The UNCTAD TRAINS database contains the HS codes for the 2012 edition of trade nomenclature. The EU measures are reported at four, six and eight-digit HS codes for different products. We converged them into the list of six-digit HS subheadings. For four-digit HS headings, all six-digit subheadings are included. For eight-digit HS codes, we take their six-digit subheadings. The assumption that if at least one eight-digit position is covered, all sub-heading is covered causes some overestimate of the product coverage. However, this overestimate is likely to be low as it concerns only ca. 3% of six-digit subheadings.

In Ukraine, trade data for 2020, the base year for our analysis, includes HS codes for 2012 and 2017 editions as Ukraine switched to the new classification in mid-2020. To ensure that we capture all possible information, we first converted the HS codes for the 2012 edition into the HS 2017 edition using WITS tables of concordance. Then we merged HS2012 and HS2017 codes for the three product categories for the first ACAA and removed duplicates to get the list of six-digit HS combined nomenclature that we used for the analysis.

A2.2 Trade data

We used trade data from the Ukraine customs database provided at <https://bi.customs.gov.ua/trade/#/> under Creative Commons Attribution 4.0 Int. License. The dataset is available for the years 2017-2020.

For exports analysis, we used data reported under customs regime 'exports – final exportation'. We used data reported under customs regime 'imports – release for free circulation' for import analysis. That allowed excluding operations related to tolling schemes from the study.

A2.3 The description of the business survey sample

The survey was prepared by the German Economic Team and the Institute for Economic Research and Policy Consulting and sent out by the European Business Association, the German Eastern Business Association and the German-Ukrainian Chamber for Industry and Commerce to their members. The

⁴⁰ UNCTAD (2017), TRAINS NTMs: The Global Database on Non-Tariff Measures. <https://trains.unctad.org/Forms/Analysis.aspx>

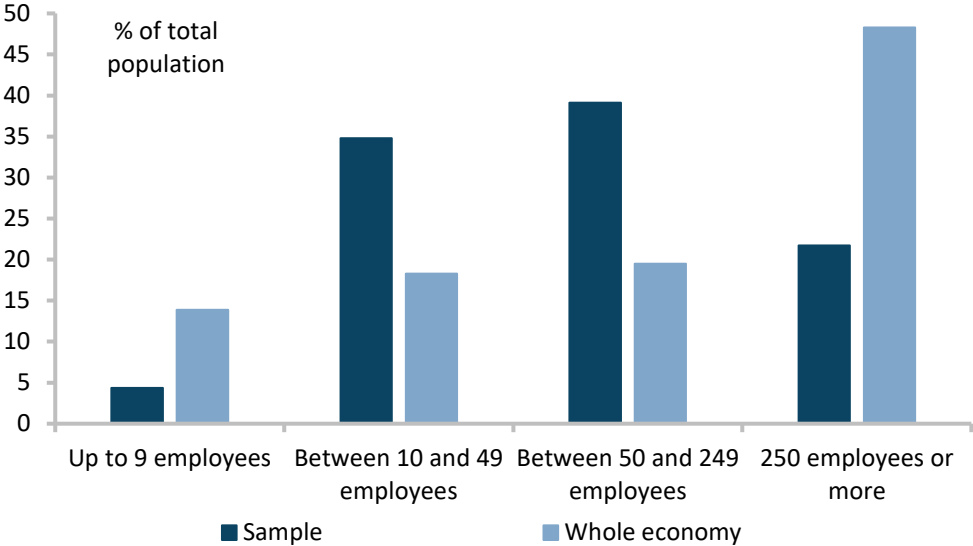
survey consisted of an online survey form and a fill-in-document. Besides, interviews with selected individuals were conducted. The survey was conducted in early 2021.

The main goal of this survey was to gather information on the experiences of EU companies exporting industrial goods to Ukraine and from Ukrainian companies exporting industrial goods to the EU.

The survey contained two parts. In the first one, we asked companies about their characteristics, such as sectors, annual turnover and number of employees. In this way, we aim at understanding the characteristics of companies' reporting coverage and costs of conformity assessment. The second part includes questions on conformity requirements, costs for certification and the type of industrial goods for which conformity is needed.

The questionnaire cannot be regarded as statistically representative as the respondents are over-proportionally companies exporting from the EU to Ukraine. It over-represents such sectors as automotive and machines and electronic equipment and consists of mostly small and medium-sized enterprises about annual turnover and employment. In contrast, large and micro enterprises are under-represented in our sample. Still, the survey helped to draw important conclusions.

Figure A1: Employment comparison of our sample vs total economy



Source: Own survey and Ukrstat, 2019, note: participants not responding to this question (1) are excluded

Annex 3: Methodology of impact assessment

A3.1 The methodology for the ACAA trade costs estimate

We measure the main ACAA impact on trade by estimating cost saving generated by eliminating additional conformity assessment required for placing products on the external market. The calculation is based on answers to the following questions:

- 1) How often exporters (importers) use the third-party conformity assessment to issue the declaration of conformity for placing products on external market

The conformity with safety requirements of particular EU – and Ukraine’s – technical regulations could be proved by producers themselves or by involving the third-party conformity assessment bodies accredited to conduct such assessments (so-called notified bodies). Each directive contains a list of allowed methods for conformity assessments. For instance, the low voltage equipment directive does not mandate producers to use the notified bodies for any products covered by the directive. In contrast, machine and EMC directives envisage notified bodies’ involvement. In any case, procedures choose the conformity assessment method and respond to partners’ requests in the destination country.

We used the survey to collect information about the frequency of the requested third-party conformity assessment for exports and imports. It is expressed as a coefficient from 0 (never) to 1 (always). It is assumed the same for all directives and measured as the share of respondents reporting the need for third-party conformity assessment for exports to the EU or imports from the EU.

Based on the survey, we use the following coefficients measuring the frequency of the requested third-party conformity assessment: 0.74 for exports and 0.94 for imports.

- 2) How many exporters (importers) spend on the third-party conformity assessment per certificate

The cost of a conformity assessment certificate could vary significantly, as it depends on product complexity, method of assessment and selected service provider. We used the survey to collect information about the costs and complemented it with data from public sources. If a product is subject to several directives, the conformity assessment costs for each are taken into account.

We relied on survey respondents’ answers representing machinery building (automotive, machines, electrical equipment and mechanisms) as the three ACAA directives are relevant primarily for this sector. We also included replies received during the interviews with business representatives.

Based on the results of the survey, interviews and the analysis of available public information, we set the conformity assessment costs per certificate at the lower bound of the range: EUR 5,000 for the conformity assessment in the EU (exports) and EUR 2,000 for the conformity assessment in Ukraine (imports). We further assume that recurrent verification costs are constituting 10% of the certificate value. We converted these costs from EUR into USD to make them comparable with usual trade statistics.⁴¹

⁴¹ The exchange rate is taken at 1.2 USD per 1 EUR.

3) How often the new certificate is needed

The frequency of conformity assessment is another important dimension for the cost estimate. We asked survey participants and interviewees about the frequency.

Then we use this information to calculate the annualised costs of conformity assessment by summing up annual payments and then dividing the sum by the number of years before the new certificate is required. For instance, if the certificate is needed every two years, annual costs are approximately equal to half of the certificate costs.

The validity of certificates depends on the selected method of conformity assessment, usually ranging from one to five years. During the interviews, respondents stated that certificates remain valid until major technological changes in products are introduced. However, regular verifications (most likely, annual) are required. We thus assume that companies get a new certificate for their products every three years. In-between, companies conduct a yearly verification.

Therefore, the annualised costs are estimated at USD 2,400⁴² per certificate for exports and USD 960 for imports.

4) How many product varieties covered by each directive are exported (imported)

Here, we measure how many product varieties – that is, products produced by different firms – are exported or imported under each directive. We estimated this number using ten-digit HS codes from customs statistics and the approximate number of firms involved in foreign trade. As products are unevenly covered by three directives earmarked for the ACAA, we calculated product varieties for each directive, including duplications to consider overlapping coverage. Then we summed them up to get the total number of traded varieties. That serves as a proxy for the needed number of certificates.

Then, we calculated total additional conformity costs for exports (imports) by multiplying a coefficient measuring the frequency of the requested third-party conformity assessment on annualised costs of conformity assessment and the number of product varieties.

Based on the available information about ACAA-covered HS 10-digit products exporter to the EU and imported from the EU and the approximate number of firms involved in trade operations, we got the estimates of product varieties per directive (Table A2) and thus calculated the total number of varieties requiring certification.

Table A2: Export and import product variety per ACAA directive

Directive	Exports	Imports
Low voltage equipment	10,198	49,404
Machine	4,716	23,361
Electromagnetic compatibility (EMC)	8,885	41,401
Total	23,799	114,166

Source: State Customs Service of Ukraine, own estimates

⁴² It is calculated as following: $(1.2 \text{ USD/EUR} * (\text{EUR } 5,000 + 2 * \text{EUR } 500))/3 \text{ years} = \text{USD } 4,800 \text{ per year}$

A3.2 The model used for the impact assessment

We use a partial equilibrium framework for the assessment of the short-term impact of the ACAA. In particular, we estimate a trade creation effect of the ACAA using import demand elasticities at HS sub-heading for Ukraine and the EU to measure the impact of cost reduction generated by the ACAA. The value of import demand elasticities are taken from the WITS SMART downloaded from <https://wits.worldbank.org/WITS/WITS/Restricted/Login.aspx>. The elasticities are capped at 5.

Annex 4: Questionnaire

1) Company information

a. How many people are currently employed at your company in Ukraine?

- to 9 employees
- Between 10 and 49 employees
- Between 50 and 249 employees
- 250 employees or more

b. How much was your company's turnover in 2019?

- <UAH 58 million (< EUR 2 million)
- UAH 58 million - 290 million (EUR 2 million-10 million)
- UAH 290 million - 1.45 billion (EUR 10 million-50 million)
- UAH 1.45 billion - 2.9 billion (EUR 50 million-100 million)
- > UAH 2.9 billion (> EUR 100 million)

c. What industry does your company operate in?

- Agriculture and food industry
- Base metals
- Mineral products
- Automotive, machines, electr. equipment and mechanisms
- Chemical (and/or) pharmaceutical products
- IT services
- Others (please specify): _____

d. What is the main activity of your company?

- Production in Ukraine and sales on the Ukrainian market
- Production in Ukraine and export
- Sales of imported products on the Ukrainian market
- Others (please specify): _____

e. To which countries do you mainly export? Please choose ALL relevant.

- EU countries
- China, India and other Asian countries
- CIS-countries and Georgia
- Non-EU-countries in Europe, incl. UK, Turkey, Israel
- Others

f. What goods trade with the EU does your company engage in? Please choose ALL relevant.

- Import of intermediate products
- Export of intermediate products
- Import of final products
- Export of final products

g. What is the share of trade volume with EU of total international trade of your company?

i. Imports

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

ii. Exports

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

2) Importance of Conformity Assessments / Certificates

a. Does your company issue declarations of conformity (with technical regulations)?

i. For imports of products from the EU

- Yes
- No

ii. For exports of products to the EU

- Yes
- No

b. Does your company use third-party conformity assessment?

i. For imports of products from the EU

- Yes
- No

ii. For exports of products to the EU

- Yes
- No

c. In what categories do you require these third-party conformity assessments? Please state number of third-party conformity assessments required per category.

	Exports to the EU		Imports from the EU	
	Intermediate products	Final products	Intermediate products	Final products
Cableways				
Construction products				
Diagnostic medical devices				
Detergents				
EcoDesign requirements for certain types of electronics				
Electromagnetic compatibility*				
Equipment for explosive atmospheres				
Explosives for civil use				
Gaseous fuels				
Hazard substances' limitations in electronics				
High-speed railways				
Hot-water boilers				
Implantable medical devices				
Labelling of energy consumption				
Lifts				
Low voltage equipment*				
Machinery*				
Marine equipment				
Measuring equipment				
Medical devices				
Packaging				
Personal protective equipment				
Pressure equipment				
Radio equipment				
Recreational crafts				
Refrigerators, freezers				
Simple pressure vessels				
Toys				
Transportable pressure equipment				
Weighing machines				

Source: EU-Ukraine Association Agreement Note: * earmarked for the first round of ACAA

d. What share of the total value of your exports to the EU requires third-party conformity assessments in general?

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

e. What share of the total value of your domestic sales in Ukraine requires third-party conformity assessments for imports from the EU in general?

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

f. What share of the total value of your exports to the EU requires third-party conformity assessments in the three categories (machinery, low voltage equipment, electromagnetic compatibility) that are to be mutually recognised in the first ACAA implementation step?

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

g. What share of the total value of your domestic sales in Ukraine requires third-party conformity assessments for imports from the EU in the three categories (machinery, low voltage equipment, electromagnetic compatibility) that are to be mutually recognised in the first ACAA implementation step?

- <1%
- 1%-20%
- 21%-40%
- 41%-60%
- 61%-80%
- >80%

3) Cost of conformity assessments

a. Overall, how high is the cost in monetary terms of obtaining a single third-party conformity assessment?

i. Ukrainian conformity assessments for imports from the EU

- <EUR 500
- EUR 500-2000
- EUR 2000-5000
- EUR 5000-10000
- >EUR 10000

ii. EU conformity assessments for exports to the EU

- <EUR 500
- EUR 500-2000
- EUR 2000-5000
- EUR 5000-10000
- >EUR 10000

- b. How would you rate the importance of third-party conformity assessments for your business activity? Are the financial and bureaucratic costs so high that they constitute an impediment for increasing trade with the EU?

Text answer: _____

- c. Would the proposed mutual recognition between UA and EU of third-party conformity assessments in the three categories (machinery, low voltage equipment, electromagnetic compatibility) significantly help you?

Text answer: _____

- d. In what other categories would mutual recognition of third-party conformity assessments be required to significantly facilitate your trade with the EU?

Please indicate the level of importance:

1: very important, 2: important, 3: moderate, 4: rather unimportant, 5: unimportant

	Exports to the EU		Imports from the EU	
	Intermediate products	Final products	Intermediate products	Final products
Cableways				
Construction products				
Diagnostic medical devices				
Detergents				
EcoDesign requirements for certain types of electronics				
Equipment for explosive atmospheres				
Explosives for civil use				
Gaseous fuels				
Hazard substances' limitations in electronics				
High-speed railways				
Hot-water boilers				
Implantable medical devices				
Labelling of energy consumption				
Lifts				
Marine equipment				
Measuring equipment				
Medical devices				
Packaging				
Personal protective equipment				
Pressure equipment				
Radio equipment				
Recreational crafts				
Refrigerators, freezers				
Simple pressure vessels				
Toys				
Transportable pressure equipment				
Weighing machines				

Source: EU-Ukraine Association Agreement