



EPERC Newsletter

Number: 10

January 27th, 2022

European Pressure Equipment Research Council

Work in progress

In September 2021 we have started the activity of Task Group 4 (Non-linear analysis) and Task **Group 7** (Fitness for service): the relevant reports are freely available on our web site. Also Task Group 1 (Fatigue) has made a further telematic meeting on September 22nd. For Task Group 12 (Recertification of existing pressure equipment) we have published a questionnaire (in English, German, French and Italian) in order to clarify which are the procedures followed in the different European countries for the recertification of such pressure equipment): of course the official authorities are the most qualified entities which can provide such information, but answers of users and notified bodies are also welcome, since they may better describe not only the details of their national procedures, but also the possible delays and defects of the same. For this year we intend to proceed according to the road map already defined in these meetings. The preliminary dates are the following (to be confirmed as soon as possible):

- March 1st 2022: Second meeting of TG4 (*)
- March 3rd 2022: Second meeting of TG7 (*)
- March 8th 2022: Third meeting of TG1
- March 14th 2022: Second meeting of TG3(Flanges)
- March 21st 2022: Second meeting of TG12 (of course, all these will be virtual meetings).
- (*) overview available in the Task Group page

Note that the last meeting of TG3 took place in Milano in January 2020 (it was one of the last meetings "in presence" organized by EPERC). In that occasion the interest in the subject was not very high: however, we have now a formal request of the experts of WG53/CENTC54 to amend Annex G EN13445.3 in accordance with the last edition of EN 1591.1, that is, considering the possibility of specifying an acceptable leak rate in the case of gases and vapours: on this problem EPERC members can find in the reserved area of our web site a document which describes the actual status of European standards on this subject. However, the request of WG53 is to go beyond the simple alignment of the two standards: in fact, what is specifically required by the experts is to give priority to something that up to now has not yet been provided neither in Annex G nor in EN 1591.1: that is, the calculation of flanges bolted to tubesheets. Since an acceptable theory on this problem still does not exist, that is exactly one of the topics for which the pre-normative work of EPERC TG 3 is necessary, thus avoiding the constraints in time and the various formalities required by the CEN rules.

Wider participation in the Task Groups

Up to now the meetings of the Task Groups were reserved to EPERC members only: starting from the last meetings in September 2021, we decided to open the meetings also to non-members. In fact, despite our membership fee for individuals is particularly favourable (70 Euro for the first year, 100 Euro for the subsequent years), it is not very easy for all the employees of the potentially interested companies, which are already engaged in the payment of more important fees in order to participate in the CEN Technical Committees, to convince their company management to spend more money in the normative (or pre-normative) activity. Well, from this moment on, we can confirm that all interested individuals can participate in our task groups, provided they are able to bring some technical expertise in the discussions. Of course, the access to the technical documents presented in the meetings (except for meeting agendas and meeting reports) will remain reserved to EPERC members. Note also that possible joint ventures among companies and individuals aimed to the development of research projects financed by the Commission, whose need can possibly arise from the discussions in the Task Groups, will remain reserved to EPERC members: I wish to remind that from the constitution of EPERC (1995) there have been many of these projects: Design by Analysis, ENVELOPS (Euro Norms Validation through Examples Linked to Operating Pressure vessel Standards), PERL (Pressure Equipment Reduction of Leak Rate), Comparative Study, etc.

In our web site we will soon publish the **input forms** for the participation in the meetings.

Webinar on the new British certification procedures

The exit of the United Kingdom from the European Union had several consequences that can create **new**

www.eperc-aisbl.eu

technical barriers to trade. In fact, for the moment all the existing European Directives have already been implemented in the British legislation: but what will happen when these directives will be modified by the European Union? There is no assurance that the same modifications will be carried out by the UK government. In any case all the certification procedures applying to products already made in accordance with these directives will lose their validity starting from the 1st of January 2023: in other words, the product itself doesn't need to be changed, however the certification procedure (which is necessary to certify the conformity of the product to the Essential Safety Requirements of the European directives) must be repeated with a British certification body, or at least with a European notified body who has a MRA (Mutual Recognition Agreement) with one of them. In other words, starting from 1st of January 2023 the CE mark on all products to be exported to UK must be replaced by the UKCA mark. Note also that the new certification procedures are different for Northern Ireland and for the remaining regions of United Kingdom.

But what will happen with CEN standards? Well, the constitution of CEN applies also to countries (like Switzerland, Norway and Turkey) which are not part of the European Union, therefore until the British standardization body (BSI) will remain member of CEN, EN standards will always be applied in UK, and cannot be replaced by equivalent British standards. This means that all harmonized EN standards (those standards whose use guarantees conformity with the European directives) will be always valid in UK, also in the case that European and British legislations will diverge: of course, in this (rather theoretical) case I suspect that the British experts will have some problems in accepting amendments of the existing harmonized EN standards not in line with the British legislation. In our web site we have recently published some documents received from the British Department for Business, Energy and Industrial Strategy which describe this new marketing situation. The same Office has offered to organize a webinar on the new UKCA goods regulatory regime: therefore I beg all our members who can be potentially interested in this webinar to inform us, or to share this information with their reference national association.

General EPERC Strategic Plan

- Comparison of International Codes & Standards
- Identification of Gaps & Needs with Code Organization and Industry
- Developments of R&D programs associated to dedicated Road Map developed by topics at the TG

level

- Development of Recommended Practices with all the rules validation
- Performance of Benchmarks on practical cases
- Code Case Proposals
- Knowledge transfer through: Regular Thematic Technical Seminars, International Conferences, Training courses, Master Classes, Summer Schools, Reports and Documentation.
- Communication and Registration to different EPERC Activities through www.eperc-aisbl.eu

Today 20 Thematic Task Groups (TGs) are planned; 9 are in operation: Fatigue (TG1); Alternative to hydro-proof tests (TG2); Bolted Flange and Leak Tightness (TG3); Nonlinear Design Rules (TG4); Additive Manufacturing (TG5); Creep Design Rules (TG6); Fitness for Service and RBI-including creep and noncreep conditions (TG7); Hydrogen Technology (TG 11); Recertification of "Pressure Equipment (TG 12); and some others in the future as, Nuclear-Nonnuclear bridge; EN13445 Background; Piping design rules; High pressure PE; New and Nonmetallic Materials; New NDE Techniques; New Welding procedures; HDPE Piping Design and Operation; In series produced pressure equipment.

All the Historical and new EPERC Reports have been uploaded on our website and can be downloaded by EPERC members; other free reports, as meeting agendas and meeting minutes, can be freely downloaded from the website. All information related to the industry of Pressure Equipment is regularly published on the home page of our web site.

Questions and communications to EPERC-AISBL must be addressed to:

info@eperc-aisbl.eu

If you want to speak with any member of the Board of Directors:

FERNANDO LIDONNICI – Chairman +39 335 380634 (Sant'Ambrogio Servizi Industriali)

ANDREA TONTI – Vice Chairman +39 320 2994689 (INAIL)

GUY BAYLAC – Technical Advisor +33 6 17361526

CLAUDE FAIDY +33 6 14101119

CRESCENZO DI FRATTA – Vice Chairman +39 334 3491982 (TÜV Austria)