Joint Industrial Program proposal for ECCC – JIP2 March 2014

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Revised JIP Description: JIP2, September 2014- August 2017

Amendments to the JIP 1 Description, as agreed from time to time by the ECCC Management Committee, are listed in Appendix 2.

1 Introduction

Since 1991, the European Creep Collaborative Committee (ECCC) has successfully determined creep rupture strength values for the most commonly used alloy grades in high temperature plants. These values were derived by a commonly developed and agreed assessment evaluation procedure using experimental datasets collated in joint European (worldwide, for some grades) initiatives by approaching all possible data producing organisations. Up to now, 55 alloy grades have been analysed and many of the determined strength values are included in the European Standards EN 10028-2, EN 10216-2, EN 10222-2, EN 10352-2, EN 10269, EN 10302, etc. Nevertheless, for some alloy grades, testing has continued since the last ECCC assessments, longer test duration results are now available, and there is a need for up-to-date dataset re- assessment. Moreover, there is a requirement for the assessment of new materials which have not previously been analysed.

ECCC data assessments have traditionally been conducted according to common procedures developed by its WG1 technical working group. Knowledge relating to the understanding of creep deformation and damage mechanisms, and the technology available for their assessment continue to advance. These must be exploited to ensure that ECCC actions continue to be state-of-the-art.

There is still an important requirement for the activities of ECCC, and the following note considers the way forward in the form of a Joint Industrial Project.

2 General Aims

In the past 20 years, ECCC has gained a strategically relevant position, but this has declined in recent years because of insufficient funding.

Besides the Technical Programme, the following general key goals are to be addressed:

- ECCC wants to keep, maintain and enhance its technological reputation based on the published ECCC creep data assessments and sheets.
- ECCC is worldwide the strongest promoter for long term creep data production, their assessment and correct exploitation
- The discussion forums in the ECCC WGs have been and want to continue to be a means for discussing HT technology and sharing the state of the art, including discussion on future

innovation.

- The formerly intimate relationship between ECCC and the CEN TCs responsible for the relevant material standards needs to be maintained.
- EN/ISO Standards including long-term creep strength values are shortly due for revision. ECCC's expertise in updating the partially outdated creep property tables and in including assessed values for not yet standardized materials is essential to determine reliable creep strengths for plant designers.
- Also the European Pressure Vessel Directive PED is under revision and will include more detailed statements on HT service, for which ECCC's expertise in creep is important.
- As modern design, dimensioning but also "fit for service" and "risk based inspections and analyses" rely more and more on FEM based non-linear simulation, high quality creep descriptive model equations, as achievable within ECCC, are of industrial interest.

ECCC is a proven partnership to safeguard HT materials properties and to promote research on this field of interest.

3 Technical Program

It is planned to support the next three years term of ECCC activities by the formation of a Joint Industrial Project to support ongoing joint creep behaviour assessment and enhance understanding, and to prepare the scenario for possible future EC funded Actions, if and when suitable Calls arise.

It is proposed to retain, as far as is possible, the original concept of ECCC based on the Memorandum of Understanding from 1992. ECCC will therefore aim to:

- Coordinate the generation of creep data Europe-wide
- Interact with and provide information to European Standards Committees
- Mutually exchange technical information on current and future activities relating to material developments, and
- Develop rules for data generation, collation and assessment.

3.1 Coordinated Generation Of Creep Data Europe-Wide

ECCC activities are accompanied with joint and coordinated creep data generation activities commonly produced in kind by the member countries and organisations. Among the proposed activities to be approved by the ECCC Management Committee in its next meetings are:

- Evaluation of different 9%Cr steels (Grade 92, FB2) with and without similar and dissimilar welds and using materials of different alloy producers.
- Continuation of ongoing evaluations of modified 2,25%Cr steels (Grades 22 mod, 23, 24),

- Testing and evaluation of cold worked austenitic steel grades, e.g. modified AISI 316 and 800 types, as well as S304H, Sanicro 25 and Tempalloy (proposed),
- Testing and evaluation of Nickel base alloys, e.g. Grades 263, 617 mod., 718+, Waspalloy, 230, including weld creep performance,
- Round robin testing exercises, for example a proposed round robin on small scale creep testing of ex-service superalloys

3.2 Interaction With And Provision Of Information For European Standards

Essential focus will be placed on

- 9%-12%Cr steels and their development, providing newest up-to-date strength values for creep rupture and 1%-strain for base materials, as well as weldments. Particular interesting features like fully re-heat treated weldments of Steel 91 grades with the same nominal creep strength as the base material (ASTM A692 Class 42) could be considered.
- New low alloy grades, for which European Standard creep strength values currently do not exist (e.g. Grades 23, 24, modified 22, etc.).
- Collation and assessment of Nickel base alloys expected to be most relevant in future, like grades 617, 263, 740, 230, 600, 625, 718, 718+, Waspalloy, etc.
- Review of older ECCC Data Sheets to be improved and completed with creep strength model equations.
- Review of creep strengths of different product types of the same grade and consideration given to other factors such as composition balance within grades, initial yield strength, etc.
- Cast engineering alloys and steels creep strength assessment (with the exception of cast 91 grade steel (C12A), which is already included in the data sheets.)

3.3 Mutual Technical Exchange Of Information On Current And Future Activities On HT Materials

Topics of interest to be discussed as potential future work items include:

- Future development of ferritic-martensitic steels for service temperatures above 620°C
- Recommendations for future materials in boilers, turbines, pipework, and potentially in nuclear plant applications
- Residual life assessment and service induced long term creep strength reduction in the 9-12% Cr martensitic steels for >100,000h .

3.4 Development Of Rules For Data Generation, Collation And Assessment

Although in the past a significant re-orientation of creep strength assessment approaches has been achieved, several relevant new questions have arisen:

- Review of the established Post (creep strength) Assessment Tests.

- Further steps in weld creep strength assessment and evaluation have to be undertaken in order to define weld strength reduction factors and their possible time dependence.
- Creep strain assessment and creep crack initiation data assessment rules need to be finalised.
- Feasibility of extrapolation of credible creep strength from short term data through innovative test and assessment methods (i.e. Licon, etc.)
- Small Scale testing and assessment, and correlation with uni-axial data
- Creep curve modelling (strain/time)
- Consideration of additional factors such as composition balance, product form, initial microstructure and strength.

3.5 (In Addition To The MoU): Interaction And Possible Collaboration With Similar Non-European Organisations And Institutions

Possible collaboration partners have been contacted:

- National Institute for Material Science of Japan (NIMS)
- American Society of Mechanical Engineering (ASME) – Pressure Vessel Code Committees for Material Strength
- Possibly, Chinese Organisations via the Shanghai Power Equipment Research Institute SPERI
- Russian Academy of Science

No collaboration activities will be pursued except with the approval of the MC. Any collaboration will also require to be regulated by an "intentions and activities" clarification document, to be mutually agreed between the ECCC MC and the related partner organisation.

4 Rules

4.1 ECCC Membership

It is proposed to retain, as far as is possible, the original concept of ECCC as defined in the 1992 Memorandum of Understanding:

- ECCC is a European organisation with only European Members.
- National membership will continue to be the basis of ECCC technical organisation (see Figure 1),

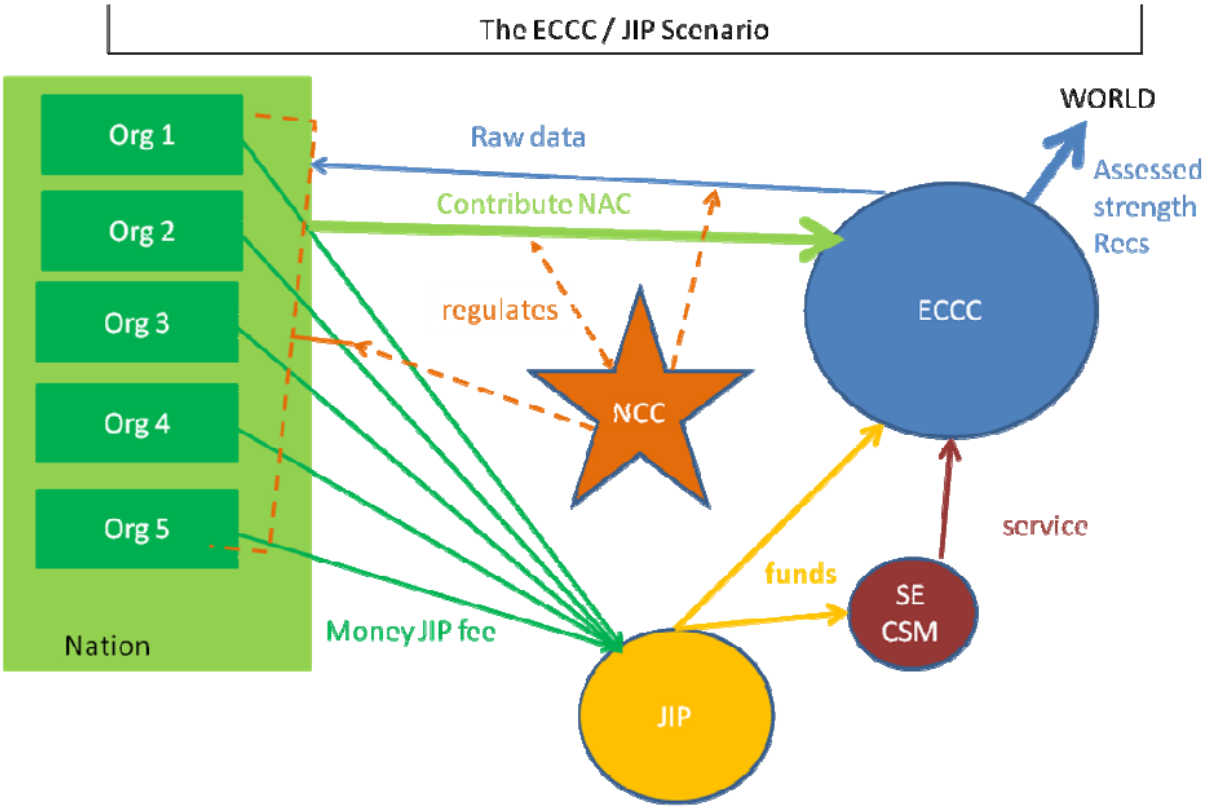

Figure 1: Interaction between ECCC, JIP, and the National Creep Committee (where this exists)

- A National Annual Contribution (NAC) is requested. This is to be contributed (see Figure 2) by a combination of testing, "raw" creep data (see **Figure 3**), in kind activity and, where appropriated, money (**Figure 4**), the total amounting to 25 Equivalent Stress Rupture Specimen Years per year. The Secretariat, together with the Executive Committee (EXEC), will keep account of the national contributions which allows for participation in the WG. The total contributed testing resources will be distributed in a suitable manner by the MC on EXEC proposal
    - If a Country cannot provide the required annual contribution and agrees to participate in only one confidential WG (3A or 3B etc.), it will be considered a "small" country, and the fee is reduced to ¼. NAC.
    - A "big" country is one for which the annual contribution considerably exceeds the requested NAC.

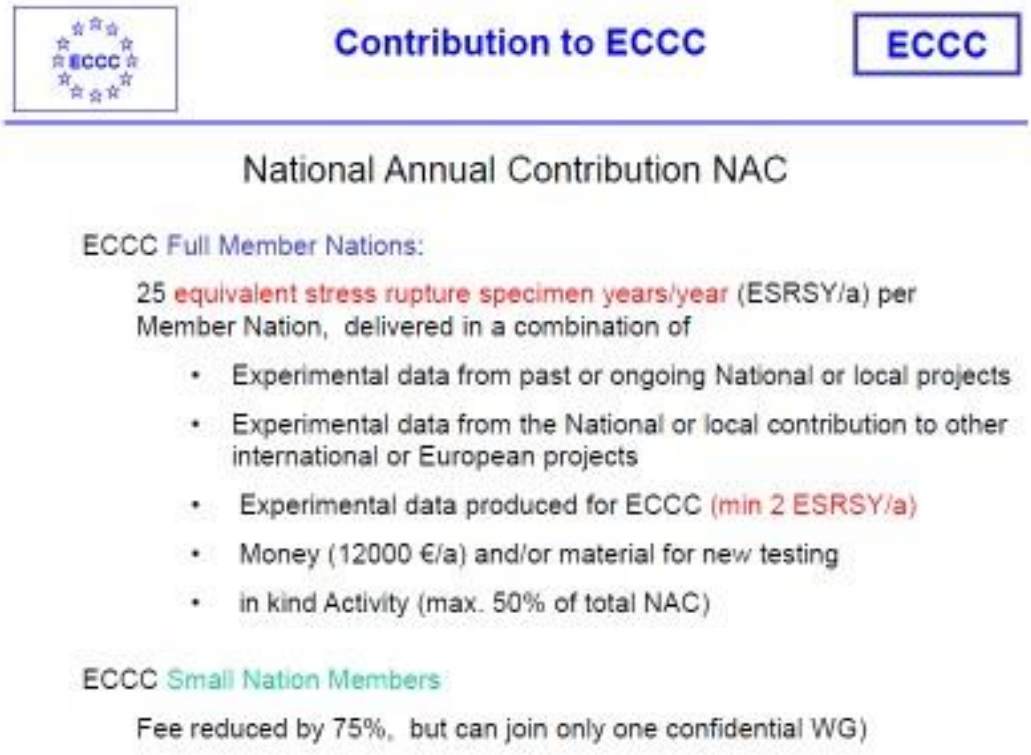

Figure 2: National Annual Contribution to ECCC: Allowable contribution types

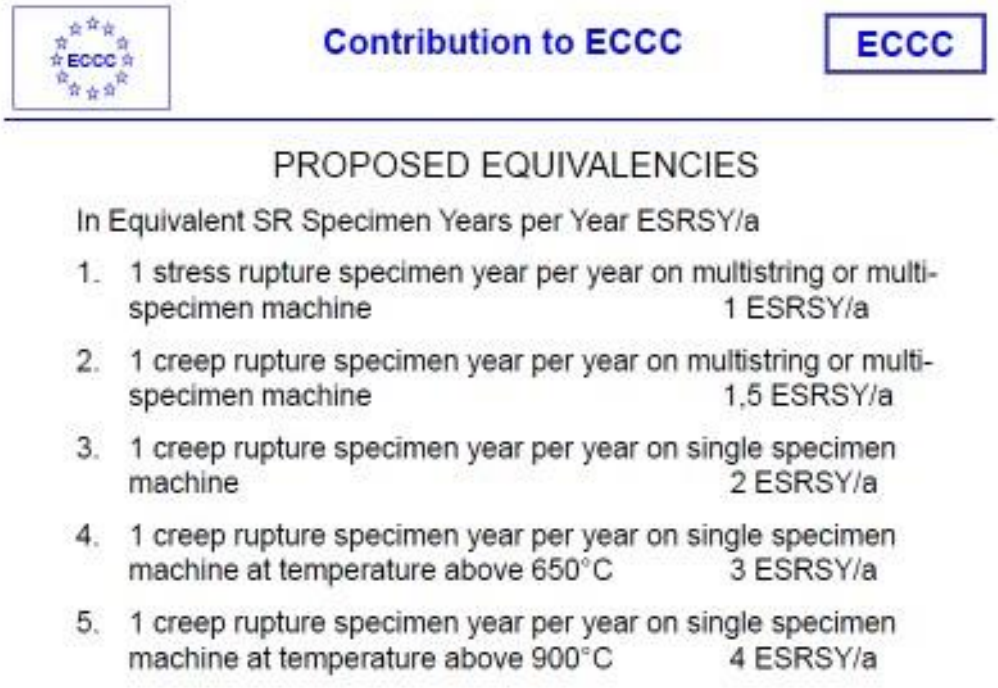

Figure 3: National Annual Contribution: Testing and Test data Equivalencies.

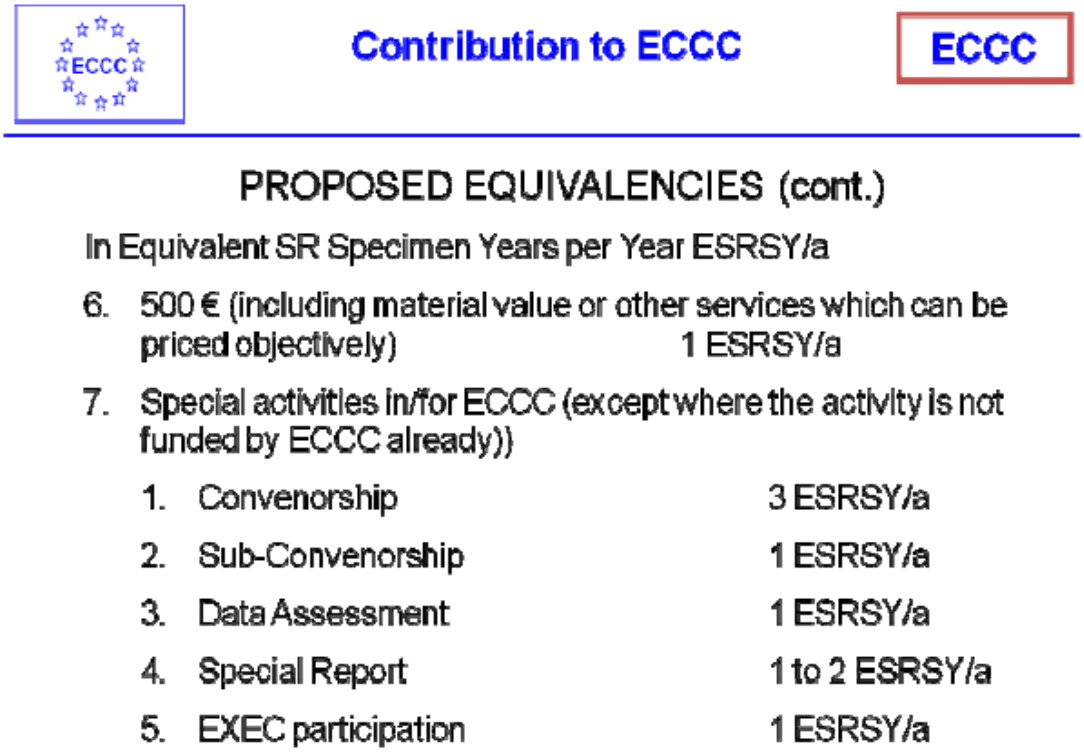

Figure 4: National Annual Contribution: Money and Activity Equivalencies

- Full member nations have a seat and vote in MC. "Big" countries with large contributions (D, UK, I) have 3 seats and 3 votes, countries which provide the required NAC have 2, and small countries 1.
- Data exchange in WG3x is confidential, i.e. only for ECCC-WG3.x members and to ECCC member companies via National MC Representative with the approval of the relevant WG Convenor. The basic principle is that data exchange should be between the data contributors and those undertaking compilation and assessment. In particular cases, additional confidentiality agreements may be negotiated.
- Funded Technical Work is assigned on formal application, based on a specification issued by the related WG and on approval by the WG in the first instance, and then also by EXEC/Secretariat. Before payment, acceptance of the results of the work is evaluated (according to ECCC Recommendations) by WG3.x and EXEC.
- ECCC Data Sheets and Recommendations will be public.

4.2 JIP Participation

- Is Company based, but requires the Company's Nation to be a member of ECCC (see Figure 1).

- Is regulated on a National basis via the related National Creep Committee (NCC) and its rules, where such a Committee has been founded and has become an ECCC member (D, UK, I, etc.) The JIP Secretariat and the ECCC EXEC will encourage contact between companies belonging to the same Nation, to form a National Committee to equitably share the ECCC contribution. It is recommended that the NCC oversees the NAC, the data exchange with ECCC, and regulates the distribution of information among the JIP participants
- Requires annual fee payment. Figure 5 shows the NAC and the JIP fee and their interaction.

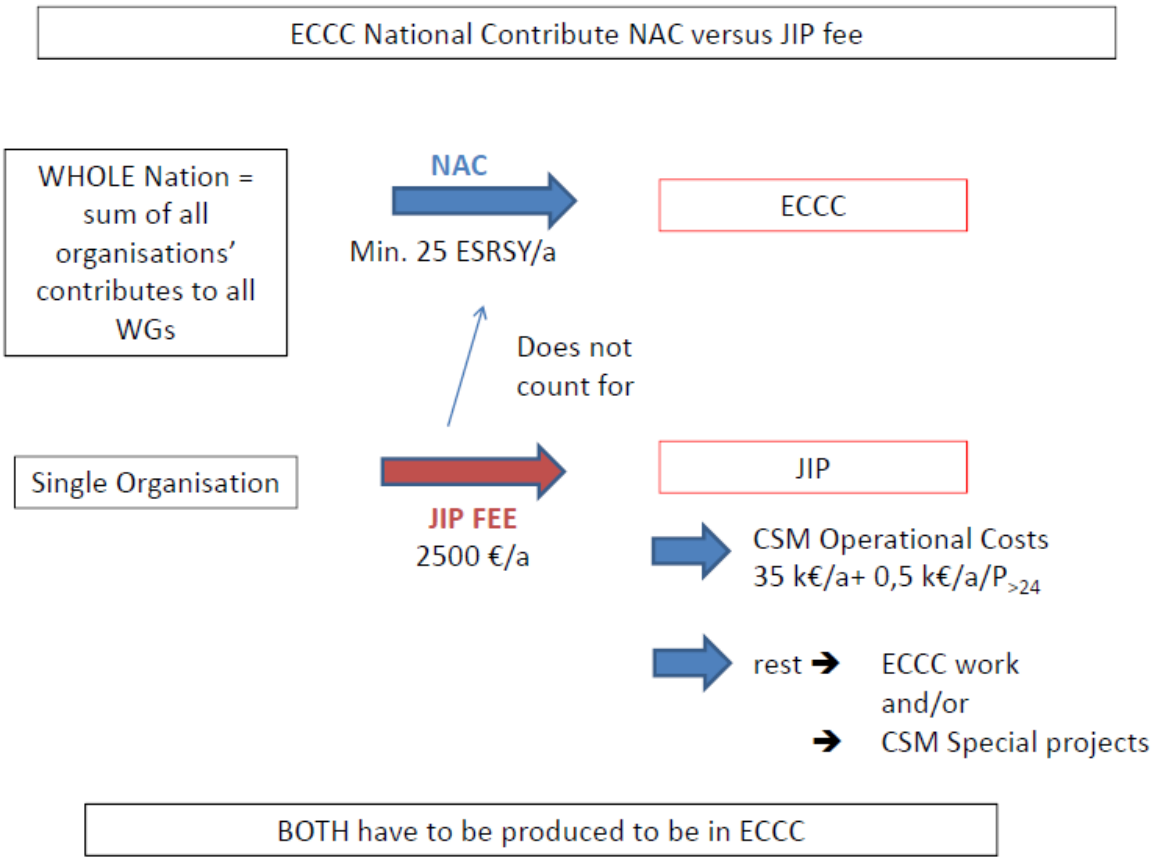

Figure 5: Contributions to ECCC and to JIP, and their interaction. (The figures relating to CSM are only examples, see paragraph 5)

- Is necessary to allow an organization to participate in ECCC WG meetings, or to access non-public ECCC documentation.
- Does not provide access to creep data when this is not to ECCC rules. However, JIP participation will provide access to all experimental data newly created in the ECCC joint projects during the duration of the JIP.

- Is necessary to allow an organization access to raw creep data collations delivered in exchange from ECCC , with the approval of the relevant WG3.x Convener.
- Does not count towards the NAC (see Figure 5).
- Allows the JIP participant to apply for technical work (for instance data assessment) defined in an ECCC issued specification and to be conducted in accordance with the ECCC recommendations.
- Ensures that the participant will be kept informed of future project developments.

4.3 JIP Participation Conditions:

- JIP Participation will be on a single common basis, irrespective whether the participant is from industry, end-user companies, R&D centres, University or other,
- Each Organization has to sign an application form with the Designated Secretariat which includes the administrative and economic details, and has the present document as a technical specification. The application form (see file "ECCC JIP Application Form" in the Appendix) acts as a form of "order" between Designated Secretariat and the partner, on the basis of which an invoice can be issued and paid**.**
- Each organisation should sign the 1992 ECCC MoU.
- Each organization should join one or more Working Groups and should make an active contribution to the work program.
- National creep committee (NCC), if available (i.e. UK, DE, IT), will be also represented without fee**,** provided that the national representative also represents a JIP participant organisation. For Countries with more than one organization, a National Coordinator is recommended. The National Coordinator will coordinate and define the NCC's action with ECCC as the country's MC representative.

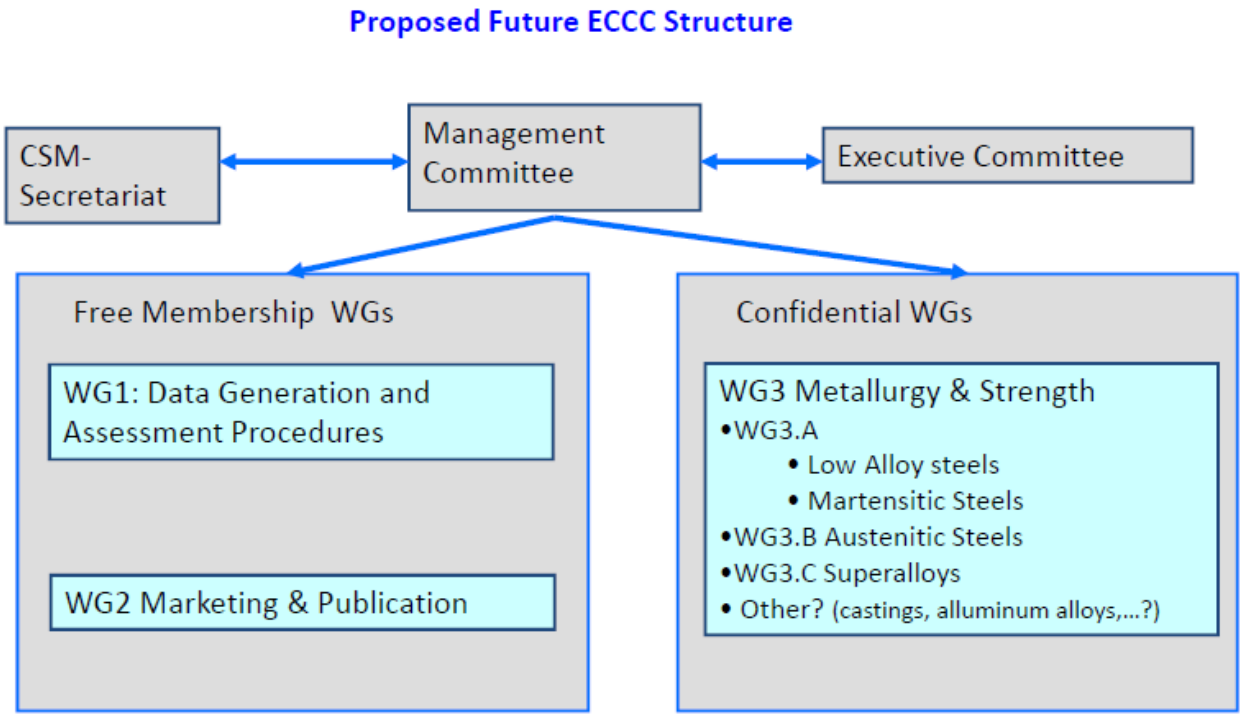

Figure 6: The Proposed ECCC Structure

4.4 Structure

4.4.1 Management Committee (MC)

The Management committee will include:

- Voting Members
    - National Representatives from each ECCC Member Country, on the basis of the original concept of ECCC as described above, as the only Voting Participants
- Non voting members, if not at the same time also National Representatives
    - All the Conveners
    - The Secretariat
    - The EXEC members, if not National Representatives.

The MC leads the ECCC and is responsible for the technical and economic directions for ECCC.

The MC elects the 6 voting members of the EXEC, who will include the MC Chairman and the two Vice-Chairmen and the Secretariat (non voting member).

The MC elects and empowers the WG-Conveners.

The MC supervises (supported by EXEC and Secretariat)

1. the National Contributions to ECCC (NAC),
2. the Joint Testing Programs,

3. Data Confidentiality Issues,
4. Interaction with any external body (CEN, ISO, ASME, etc.)

The MC approves:

1. (on WG Convener recommendation) the WGs' working programs (technical, budget)
2. (on WG Convener recommendation) the total budget – in order to avoid overspending, setting priorities,
3. (on WG Convener recommendation) the official versions of data sheets and recommendations
4. before publication, ECCC related scientific articles to conferences and papers,
5. (on EXEC recommendation) the MC minutes as prepared by the Secretariat.
6. (on EXEC recommendation) collaboration with other organizations based on specific agreement documents (see chapter 3.5).

4.4.2 The Executive Committee (EXEC)

The Executive Committee will be composed of 6 members elected by the MC and it will:

- Via the EXEC Chairman, being also the MC Chairman, preside the MC
- Prepare MC decisions, but will need MC approval for any strategic issue (see 4.3.1.)
- Supervise the JIP
- Interact with Secretariat
- Control application of the rules (ECCC and JIP)
- Manage operating decisions on a day-to-day basis on behalf of the MC
- Examine and oversee JIP accounts on behalf of ECCC
- Assign (on WG Convener recommendation) the supported work packages funded by the JIP to single companies.

4.4.3 The Working Groups (WG)

The WGs are led by a Convener elected by the MC and a sub-convener, defined by the WG, that supports the Convener as a deputy or may have some delegated responsibilities. Every JIP participant may apply to work within one of the "free membership" WGs (WG1 and 2); Membership to a "confidential" WG (WG3 and its sub-groups) is restricted to ECCC members contributing raw data , active in test programs, data collation and/or assessment or associated activities.

The WG Convener (aided by the sub-convener and WG members) is responsible for:

- Preparing and – after WG and MC approval – following the Working Program of the WG,
- Chairing the WG meetings,
- Co-ordinating WG work,
- Approving the WG minutes (prepared by the Secretariat),
- Supervising the experimental data distribution and confidentiality issues according to the rules issued by the MC,
- Supervising WG output documents,
- Supporting interaction with external organizations, but only when authorized by the MC,
- Preparing the specification for, supervising and organising the WG's approval on funded and not funded (i.e. part of a National Contribution) work packages assigned, supported by the WG members.

The WG members are expected to actively contribute to the WG work and their contribution (in activity, e.g. assessments) will be monitored by the Secretariat and the Convener. Non active members could be excluded by WG decision.

4.4.4 Secretariat

Tasks and issues related to the Secretariat are summarized in chapters 5 and 6. The Secretariat will be allocated to a Company within an ECCC member Nation . The allocation of the Secretariat will be determined by the MC on the sole basis of ensuring the most effective administration of the JIP. The Designated Secretariat will be in charge for a three years period that will be prolonged if not terminated by either the MC or the Designated Secretariat, six months in advance of the contract expiry date.

4.5 Technical Information Handling

4.5.1 Confidentiality

All topics handled within ECCC are agreed to be confidential as set forth in the ECCC MoU and the present JIP. In particular:

- Contributed and "old" creep data are only handled within the WG3 and are accessible only to the data contributing WG members (see 4.3.3.) and to ECCC

members via formal request through their National representatives to the WG Convener and the MC.

- Jointly produced "new" creep data via the ECCC National contributions are shared following the rules of chapter 4.
- WG documents can be accessed by the WG members only,
- The access to the non public ECCC Web site will be regulated by a suitable safety system. Also earlier ECCC documents are only accessible through the web-site and its confidentiality regulating system
- Public ECCC documents require MC approval (based on related WG Convener recommendation)
- Personal publications based on ECCC induced findings or data need to quote ECCC and the approval of the related WG Convener, who may request MC intervention in particular cases or situations.
- Data exchange with organisations outside the ECCC may occur if
    - MC has formally approved the data exchange and nominated an official delegate to organize this data exchange
    - The related WG Convener and group have been informed of the data exchange activity and the MC approval (if not requested directly via the WG Convener).
    - The results from this data exchange shall be reported to ECCC MC in order to give ECCC a benefit from this data exchange
    - If non European organizations are involved, a document of agreement has been prepared and undersigned by both organizations that provides sufficient assurance for mutual confidentiality about relevant information (see chapter 3.5).

4.5.2 Liability

All ECCC documents meant for the public domain will quote a disclaimer that states that "Although the published information has been carefully evaluated, warranty for the validity of the information cannot be given. The user of ECCC information takes sole responsibility for any use of the information." All public ECCC documents will also contain an ECCC copyright declaration.

4.5.3 Copyright

The copyright of all information published on behalf of ECCC on paper, during oral presentations or by electronic means stays with the ECCC Management Committee. Reproduction is not allowed if not with explicit authorisation by the ECCC Management Committee. A legally suitable statement in this sense has to be applied to each document issued on behalf of ECCC.

5 Designated Secretariat

For the JIP 2 time period starting September 1st 2014 and for the minimum duration of three years, that is renewed according the statement above (chapter 4.4.4) CSM - Centro Sviluppo Materiali – Rome, Italy is the designated Secretariat on the basis of this proposal.

6 Annual Budget Share Proposal and Secretariat Activities

6.1 CSM Budget Proposals

The fee for participation in the JIP will be 2500 Euro per partner per year for 3 years. If less than 18 organisations agree to participate, CSM may defer or cancel the JIP.

If 18 or more organisations participate in the JIP, the following annual budget share for the CSM operational costs is proposed:

A) The JIP 2 CSM secretariat activity will last 3 Years, starting from 1/9/2014, and have an operational budget of 35.000 Euro per year, plus 500 € for each additional participant in excess of 24 in the event that more than 24 organisations participate. The basic operational tasks to be undertaken by CSM will be:

- Contracts management: invoices and payments
- WG Secretariat activities including
    - Organisation of contacts and meetings administration. Hosting and resource provision for meetings may be undertaken by CSM, or alternatively, by agreement, by a participant organisation.
    - WG minutes preparation
        - An executive Summary, available after Convener approval to all JIP partners
        - A full meeting minutes, available after Convener approval to the

active WG members

- account of partners and countries contribution
- Management Committee Secretariat including:
    - Organisation (contacts and resources for meetings as described above, budget plan for the running year, etc.)
    - minutes preparation, to be issued to all MC members after EXEC approval
- Administrative support
- ECCC documentation management support within CSM website
- Meetings organisation: In principle 5 meetings are planned per year for WG and MC; but the Secretariat will combine the meetings where possible "back to back", planning for example WG1 on Tuesday, WG3B on Wednesday morning, MC in the afternoon and WG3.A and C on Thursday morning and afternoon.

Table I : Some Examples on JIP ANNUAL Budget Share (all costs in €)

	Less than 18 Participants	18 – 24 participants		More than 24 participants
		Example for 18 participants	Example for 24 participants	Example for 30 participants
Fee per organization	Probably No JIP	2.500	2.500	2.500
Total Amount Collated to JIP	0	45.000	60.000	75.000
Basic CSM operational budget	-	35.000	35.000	38.000
Meetings with CSM organization	0	5 meetings (MC. WG1, WG3A, WG3B, WG3C)	5 meetings (MC. WG1, WG3A, WG3B, WG3C)	5 meetings (MC. WG1, WG3A, WG3B, WG3C)
Money available to ECCC	-	10.000	25.000	37.000

B) All available funds in excess of the CSM basic operational budget as defined above will be made available for ECCC activities, in accordance with Table 1, and may be assigned (by MC decision and following the route as detailed in paragraph 4) to (examples):

a. Data assessment (contribution for each assessment will be agreed case by case)Data generation by testing (besides and/or in addition to the NAC related mandatory testing)

b. Data collection
c. FEA of components
d. ECCC data base of the creep values used for all the issued assessments,
e. Special projects (dedicated web site, lobby/scouting activity for EU funding, newsletter, WGs secretariat)

C) External Contracts: For each technical work contract (e.g. data assessment, FEA, metallography, etc.) managed by CSM on behalf of the ECCC with external, non JIP, organizations, CSM will retain 10% of the payment from JIP funds to cover administrative and management costs.

6.2 Special Projects, CSM Proposed Activities

Funds above the CSM basic operational costs may also be used for "Special Projects" to be allocated to CSM. Any such Special Project will require a specific MC decision. CSM proposes and applies for the following additional activities:

- Dedicated website support for distribution of documents and information according to a specification issued by MC addressing – among other questions- the confidentiality regulations (for instance including that new JIP members may not have free access to past ECCC documents (1992-2005), except by agreement of MC).
- Scouting activity with EC in order to promote/support the inclusion of suitable calls into the EC funded projects (ideally a Network of Excellency NoE) that would allow ECCC to apply for European economical support.
- Periodical newsletters (i.e. 2 per year) freely accessible on the ECCC website
- Additional Working Group meetings organisation (2nd meeting/year for all/selected WG) and/or other additional WGs (besides those in Figure 6)
- 3rd ECCC conference organization (2013) as far as the ECCC internal conference preparation (organisation and/or scientific committee pre-conference meeting, etc.) and strategy (contact to editor or towards conference host etc.) are concerned. Conference expenses and revenues management will be agreed separately.
- Other "institutional" topics that may arise in the MC may also be discussed.

The costs and time scales for these projects are summarised hereunder:

Table II: Special Projects Proposals

Topic	Activity Duration (proposed)	Estimated Cost [€]
Stand alone Website	1 year set-up + maintenance as needed	24 k€ (set-up) + 13k€/year
NoE Pressure Group		24 k€
ECCC Newsletter	annual	7 k€ per year
Additional meetings		5 k€/meeting set*
3rd ECCC conference	2013 – 1 year	To be agreed
Others	To be discussed	To be agreed

*A meeting set is 1 meeting for each WG in Figure 6 organised "back to back".

Special projects undergo the same approval process as other technical work funded by the JIP:

- The proposal needs to be accompanied by a Technical Specification
- The Proposal and its Technical Specification will require the approval of the MC.
- CSM will then do the associated work under the EXEC's supervision.
- When completed, EXEC should approve the result
- On EXEC approval, CSM will transfer the related funds from the JIP account.

6.3 Duration

The JIP will last for three years. It will automatically be renewed for subsequent 3-year periods without change in the terms and conditions, unless the MC decides otherwise. The future of the JIP will be a major item to be discussed and determined at the final (third year) meeting of the MC.

7 JIP Set Up

After MC approval CSM will encourage JIP participations, by circulating:

- The ECCC invitation letter indicating:
    - CSM will be the Organizer of the Joint Industrial Programme,
    - The application form should be signed by the responsible person of each partner company

    - The confidentiality agreement has to be signed by each partner company
- CSM will then each year invoice the JIP fee, which will be payable upon invoice receipt for each calendar year, or by agreement with CSM.
- In case of technical work allocations to JIP Participants or external organizations CSM will issue an order accompanied by the ECCC technical specifications applicable.
- After completion of the technical work, including full reporting, and technical acceptance by the involved WG and Executive Committee CSM will require the issue of an invoice which will be paid in 90 days.

8 Legend

CSM: Centro Sviluppo Materiali , Italy

Designated Secretariat: The company that has been accepted by the MC to operate as JIP coordinator and ECCC secretariat

EC: European Commission

ECCC: European Collaborative Creep Committee

ESRSY/a: Equivalent Stress Rupture Specimen (test duration) Years

per year EU: European Union

EXEC: Executive

Committee FEA –

Finite Element Analysis

HT: High Temperature

JIP: Joint Industrial

Project MC:

Management

Committee

MoU: Memorandum of Understanding (ECCC's basic original agreement) NAC: National Annual Contribution (to ECCC)

NCC: National Creep Committee (or Organisation or Group) NoE: Network of Excellency (EC Framework VII funding type)

Organisation : Any type of structure with an organized statute, including all types of

companies (i.e. that is also a legal entity, like industrial companies, universities, research centres, utilities, etc., as well as the NCC or similar.

WG: Working Group

Nations are designated according to the EU two letter standard, for example:

AT: Austria,

BE: Belgium

CH: Switzerland

CZ: Czech Republic

DE: Germany

DK: Denmark

ES: Spain

FI: Finland

FR: France

GR: Greece

IT: Italy

NL: The Netherlands

PR: Portugal

SE: Sweden

SL: Slovakia

UK: United Kingdom

Appendix 1

ECCC JIP Application form

ECCC JIP

Application form 2011

Centro Sviluppo Materiali SpA
ECCC-JIP Secretariat
Via di Castel Romano 100
I-00128 Roma
Att.n: Eng. Egidio Zanin

The undersigned ..... by the present communication confirms the will of the Company represented to join the initiative named "ECCC Joint Industrial Project" , whose secretariat is operated by Centro Sviluppo Materiali SpA (CSM).

By this communication, CSM. is also informed that for the undertaken activities and initiatives, the person designed by the Company to represent it in the above mentioned initiative, is:

Title ..... Name ..... Surname .....
Position in the Company .....
Address .... ZipCode.....
Town ..... District/Province .....
Phone. ..... Mobile. ..... e-mail .....

To support secretariat activities to be carried out in 2011 a fee of 2.500 Eur + VAT will be paid, after the receipt of invoiced, by bank transfer entitled to:

Centro Sviluppo Materiali SpA
Bank: MONTE DEI PASCHI DI SIENA - Ag. ROMA 11, Piazza dei Navigatori, 1, I-00144 ROMA,
IBAN IT36O0103003211000000177845
Causal: ECCC JIP secretariat "Contribution 2011"

For the invoice, please refer to the following data:
Heading /Name of the Company.....
Legal Office .....
Zip Code/Town/District .....
Vat Number: .....

Best Regards

Appendix 2

Amendments to the JIP 1 Description

JIP2 Amendment 1 – March 2015 – National Participation

A new category of National Participation in the ECCC JIP is defined: the "very small" country, with entitlement to access only open information within ECCC, including WG1 and MC, but not WG3.x. This may be made available, by MC agreement, to a Nation not able to meet the commitments of a "small" nation. This category includes:

- JRC Petten, which will pay no JIP fee, but will contribute 1 "C" in testing, e.g. small punch
- Switzerland, for which EMPA will take part in WG1

This is an addition to Section 4.1 – Rules – ECCC Membership: no material is deleted.

JIP2 Amendment 2 – March 2015 – Single Organisation Membership

Where there is no National Creep Group, membership may be made available to an individual organisation, from the European Continent, on the following basis (to be agreed by MC case-by-case):

- JIP fee PLUS testing to the value of 1 "C" each 4 years, i.e. equivalent to a "small nation". This would provide entitlement to attend one WG3.x group – as for a "small nation"

This is an addition to Section 4.1 – Rules – ECCC Membership: no material is deleted.