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## COVER NOTE

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| From:            | Mr Klaus-Heiner LEHNE, President of the European Court of Auditors  |
| date of receipt: | 17 November 2016  |
| To:              | Mr Peter KAZIMIR, President of the Council of the European Union  |
| Subject:         | Report on the annual accounts of the European Joint Undertaking for ITER and the Development of Fusion Energy for the financial year 2015 together with the Joint Undertaking's reply |

Delegations will find attached the European Court of Auditors' report on the annual accounts of the European Joint Undertaking for ITER and the Development of Fusion Energy for the financial year 2015.

This report is accompanied by the Agency's reply and will shortly be published in the Official Journal of the European Union.

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Encl.: Report on the annual accounts of the European Joint Undertaking for ITER and the Development of Fusion Energy for the financial year 2015 together with the Joint Undertaking's reply.<sup>1</sup>

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<sup>1</sup> In English only. The other languages of this report are available on the European Court of Auditors' website: <http://eca.europa.eu/>.



EUROPEAN  
COURT  
OF AUDITORS

## Report on the annual accounts of the European Joint Undertaking for ITER and the Development of Fusion Energy for the financial year 2015

together with the Joint Undertaking's reply

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## **INTRODUCTION**

1. The European Joint Undertaking for ITER<sup>2</sup> and the Development of Fusion Energy (F4E) was set up in March 2007<sup>3</sup> for a period of 35 years. While the main fusion facilities were to be developed at Cadarache in France, the Joint Undertaking is located in Barcelona.
2. The tasks of the Joint Undertaking are<sup>4</sup>:
  - (a) to provide Euratom's contribution to the ITER International Fusion Energy Organisation<sup>5</sup>;
  - (b) to provide Euratom's contribution to 'Broader Approach' (complementary joint fusion research) activities with Japan for the rapid development of fusion energy;
  - (c) to prepare and coordinate a programme of activities in preparation for the construction of a demonstration fusion reactor and related facilities, including the International Fusion Materials Irradiation Facility.
3. The members of the Joint Undertaking are Euratom, represented by the European Commission, the Euratom Member States and other countries which have concluded cooperation agreements with Euratom in the field of controlled nuclear fusion (as of 31 December 2015: Switzerland).

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<sup>2</sup> International Thermonuclear Experimental Reactor.

<sup>3</sup> Council Decision 2007/198/Euratom of 27 March 2007 establishing the European Joint Undertaking for ITER and the Development of Fusion Energy and conferring advantages upon it (OJ L 90, 30.3.2007, p. 58), amended by Council Decision 2013/791/Euratom of 13 December 2013 (OJ L 349, 21.12.2013, p. 100) and Council Decision 2015/224 of 10 February 2015 (OJ L37, 13.02.2015, p. 8).

<sup>4</sup> The ***Annex*** summarises the Joint Undertaking's competences, activities and available resources. It is presented for information purposes.

<sup>5</sup> The ITER International Fusion Energy Organisation was set up in October 2007 for an initial period of 35 years to implement the ITER project, which aims to demonstrate the scientific and technological feasibility of fusion energy. Its Members are Euratom, the People's Republic of China, the Republic of India, Japan, the Republic of Korea, the Russian Federation and the United States of America.

## **INFORMATION IN SUPPORT OF THE STATEMENT OF ASSURANCE**

4. The audit approach taken by the Court comprises analytical audit procedures, testing of transactions at the level of the Joint Undertaking and an assessment of key controls in the supervisory and control systems. This is supplemented by evidence provided by the relevant work of other auditors and an analysis of management representations.

### **STATEMENT OF ASSURANCE**

5. Pursuant to the provisions of Article 287 of the Treaty on the Functioning of the European Union (TFEU), the Court has audited:

- (a) the annual accounts of the Joint Undertaking for ITER and the Development of Fusion Energy<sup>6</sup>, which comprise the financial statements and the reports on the implementation of the budget<sup>7</sup> for the financial year ended 31 December 2015, and
- (a) the legality and regularity of the transactions underlying those accounts.

#### *The management's responsibility*

6. In accordance with Articles 39 and 50 of Commission Delegated Regulation (EU) No 1271/2013<sup>8</sup>, the management is responsible for the preparation and fair presentation of the annual accounts of the Joint Undertaking and the legality and regularity of the underlying transactions.

- (a) The management's responsibilities in respect of the Joint Undertaking's annual accounts include designing, implementing and maintaining an internal control system relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, selecting and applying appropriate

<sup>6</sup> These include the balance sheet and the statement of financial performance, the cash-flow table, the statement of changes in net assets, a summary of the significant accounting policies and other explanatory notes.

<sup>7</sup> These comprise the reports on implementation of the budget, a summary of budgetary principles and other explanatory notes.

<sup>8</sup> OJ L 328, 7.12.2013, p. 42.

accounting policies on the basis of the accounting rules adopted by the Commission's accounting officer<sup>9</sup>, and making accounting estimates that are reasonable in the circumstances. The Director approves the annual accounts of the Joint Undertaking after its accounting officer has prepared them on the basis of all available information and established a note to accompany the accounts in which he declares, *inter alia*, that he has reasonable assurance that they present a true and fair view of the financial position of the Joint Undertaking in all material respects.

- (b) The management's responsibilities in respect of the legality and regularity of the underlying transactions and compliance with the principle of sound financial management consist of designing, implementing and maintaining an effective and efficient internal control system comprising adequate supervision and appropriate measures to prevent irregularities and fraud and, if necessary, initiating legal proceedings to recover funds wrongly paid or used.

#### *The auditor's responsibility*

7. The Court's responsibility is, on the basis of its audit, to provide the European Parliament and the Council<sup>10</sup> with a statement of assurance as to the reliability of the annual accounts and the legality and regularity of the underlying transactions. The Court conducts its audit in accordance with the IFAC International Standards on Auditing and Codes of Ethics and the INTOSAI International Standards of Supreme Audit Institutions. These standards require the Court to plan and perform the audit to obtain reasonable assurance as to whether the annual accounts of the Joint Undertaking are free from material misstatement and the underlying transactions are legal and regular.

8. The audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the accounts and the legality and regularity of the underlying transactions.

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<sup>9</sup> The accounting rules adopted by the Commission's accounting officer are derived from the International Public Sector Accounting Standards (IPSAS) issued by the International Federation of Accountants or, where relevant, the International Accounting Standards (IAS)/International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board.

<sup>10</sup> Article 107 of Regulation (EU) No 1271/2013.

The procedures selected depend on the auditor's judgement, which is based on an assessment of the risks of material misstatement of the accounts and material non-compliance by the underlying transactions with the requirements in the legal framework of the European Union, whether due to fraud or error. In assessing these risks, the auditor considers any internal controls relevant to the preparation and fair presentation of the accounts, as well as the supervisory and control systems that are implemented to ensure the legality and regularity of underlying transactions, and designs audit procedures that are appropriate in the circumstances. The audit also entails evaluating the appropriateness of accounting policies, the reasonableness of accounting estimates and the overall presentation of the accounts.

9. The Court considers that the audit evidence obtained is sufficient and appropriate to provide a basis for the opinions set out below.

***Opinion on the reliability of the accounts***

10. In the Court's opinion, the Joint Undertaking's annual accounts present fairly, in all material respects, its financial position as at 31 December 2015 and the results of its operations and its cash flows for the year then ended, in accordance with the provisions of its financial rules and the accounting rules adopted by the Commission's accounting officer.

***Opinion on the legality and regularity of the transactions underlying the accounts***

11. In the Court's opinion, the transactions underlying the annual accounts of the Joint Undertaking for the year ended 31 December 2015 are, in all material respects, legal and regular.

***Emphasis of matter***

12. Without calling into question the opinions expressed in paragraphs 10 and 11, the Court draws attention to the following. The Council conclusions adopted on 7 July 2010<sup>11</sup> approved 6,6 billion euro (in 2008 values) for the Joint Undertaking contribution to the ITER

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<sup>11</sup> Council conclusions on ITER status of 7 July 2010 (Ref. 11902/10).

construction phase of the project initially planned for 2020. This figure, which doubled the initial budgeted costs for this phase of the project, did not include 663 million euro proposed by the European Commission in 2010 to cover potential contingencies<sup>12</sup>.

13. The complexity of ITER activities<sup>13</sup> puts the amount of the Joint Undertaking contribution to the construction phase of the project at significant risk of increasing<sup>14</sup>. This risk mainly results from changes in the scope<sup>15</sup> of the project deliverables and delays in the current schedule, which was considered unrealistic<sup>16</sup>. The release of a new ITER project baseline (scope, schedule and costs) by the ITER IO Council, initially planned for June 2015, was postponed first to November 2015 and then to June 2016. In its meeting of 15-16 June 2016 the ITER Council endorsed an updated integrated schedule for the ITER Project which identifies the date of achievement of the strategic milestone of the construction phase of the project ("First Plasma") as December 2025.

14. In 2015, F4E launched a major exercise to calculate the estimated cost at completion (EAC) of the Joint Undertaking contribution to the construction phase of the project. The

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<sup>12</sup> Communication from the Commission to the European Parliament and the Council of 4 May 2010 on ITER status and possible way forward (COM(2010) 226 final).

<sup>13</sup> Resulting in particular from the innovative engineering solutions and technical challenges of many of the in-kind contributions to be provided to ITER International Organisation (ITER IO) and from changes in technical specifications and scope, which are the remit of ITER IO and over which F4E has little or no control.

<sup>14</sup> As also reported in the Fusion for Energy Progress Report to the Council of the European Union of November 2015 and in the 4rd Annual Assessment of Fusion for Energy – Report to the Council of the European Union of November 2015.

<sup>15</sup> As regards the project changes request to the in-kind contributions to be provided to ITER IO, the previous system in place for the compensation of the cost increases resulting from these changes (based on the MAC-10 guidelines) proved to be inefficient in detriment of the cost of the F4E contribution to the project. In March 2015, the ITER Council agreed to replace it by a new reserve fund system designed to offset the cost deviations arising from changes in the scope of the domestic agencies' contributions to the project.

<sup>16</sup> Paragraph 12, footnote 12, of the Court's 2013 report (OJ C 452, 16.12.2014, p. 44).



result was an expected cost increase of around 2 375 million euro<sup>17</sup> (using a 50 % confidence level as applicable to major engineering projects)<sup>18</sup>.

15. F4E has not yet updated the valuation of the Joint Undertaking contribution to the ITER project beyond the finalisation of the construction phase.

16. As a result of the challenges faced by the ITER project, in 2015 the Director-General of ITER IO presented to the ITER Council an action plan with specific measures to address the main constraints affecting the development of the project<sup>19</sup>. The F4E Governing Board adopted its own action plan, which largely supports that of ITER IO<sup>20</sup>. While some key actions started in 2015<sup>21</sup>, the full implementation of both action plans is now subject to decisions adopted by the ITER Council at its meeting of June 2016 as regards the new schedule and resources for the ITER project.

17. The comments which follow do not call the Court's opinions into question.

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<sup>17</sup> This estimate includes an additional cash contribution to ITER IO before 2020 of 300 million euro, and 75 million euro related to the transfer of EU procurements to Japan, which was not foreseen in the initial cost baseline. See the Fusion for Energy Progress Report to the Council of the European Union of November 2015.

<sup>18</sup> The new estimate represents an increase of 35 % over the figure approved by the Council in 2010. That it is also greater than the increase of 428 million euros reported by F4E in November 2014 (see paragraph 14 of our report for 2014) is due to the wider scope of the 2015 exercise, which aimed to determine the EAC of the entire construction phase, while the previous exercise only estimated cost deviations on awarded contracts.

<sup>19</sup> On 5 March 2015 the ITER IO Council appointed a new Director-General and endorsed the 2015 ITER IO action plan.

<sup>20</sup> The F4E Governing Board has endorsed the main principles set out in the F4E action plan, in particular the measures to support the creation of a new integrated organisation as envisaged by the new ITER IO Director-General, and has asked that any legal issue affecting the implementation of the action plan be examined.

<sup>21</sup> In particular, the establishment of the reserve fund mechanism, the Executive Project Board and integrated project teams in the area of buildings.

## **COMMENTS ON BUDGETARY AND FINANCIAL MANAGEMENT**

### ***Presentation of the accounts***

18. In the notes to the financial statements, the table and the information included under heading 4.3.1.1. 'ITER Procurement Arrangement (ITER IO)', reflect the procurement arrangements signed (column 3) and those credited so far (column 4). However, the table does not show the actual degree of advancement of the works in progress. In the 2015 annual accounts, F4E has supplemented this information with an estimate of the work in progress taking into account the total value of spending on contracts linked to PAs, and a chart showing the achievement of milestones for each procurement arrangement signed with ITER IO<sup>22</sup>. Despite the estimate presented in the 2015 accounts, further work is needed to present more accurate information on the status and value of the activities carried out so far by the Joint Undertaking<sup>23</sup>.

### ***Implementation of the 2015 budget***

19. The final 2015 budget available for implementation included commitment appropriations of 467,9 million euro and payment appropriations of 586,08 million euro. The utilisation rates for commitment and payment appropriations were 100 % and 99,9 % respectively. However, the implementation rate for commitment appropriations with respect to the 2015 initial budget was 49 %<sup>24</sup>. Out of the 467,9 million euro available for commitment appropriations, 52 % was implemented through direct individual

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<sup>22</sup> See pages 33 to 35 of the 2015 Provisional Accounts of the Joint Undertaking.

<sup>23</sup> At the time of the audit (April 2016), F4E was reaching an agreement with ITER IO on a modified framework for the distribution of credit throughout the life of a procurement arrangement so as to reflect more accurately the progress achieved by each domestic agency.

<sup>24</sup> The initial budget available for commitment appropriations, adopted on 3 December 2014, was 953,6 million euro. It was reduced to 467,9 million euro in the amending budgets of 9 June and 2 December 2015 because of delays in the implementation of activities relating to the ITER construction budget chapter.

commitments, and the remaining 48 % through global commitments<sup>25</sup>. The implementation rate for payment appropriations with respect to the 2015 initial budget was 82 %<sup>26</sup>.

### **COMMENTS ON KEY CONTROLS IN THE JOINT UNDERTAKING'S SUPERVISORY AND CONTROL SYSTEMS**

20. Significant progress has been achieved in many areas, and the exercise carried out by F4E in 2015 to calculate the EAC for the construction phase of the project was a major achievement (see paragraphs 14 and 15). At the time of the Court's audit (April 2016), a number of key actions for the management of the Joint Undertaking's activities were being addressed:

- F4E is further developing a central and uniform system for the integration of all the operational, financial and budgeting data, which will allow regular monitoring and control of estimates, costs and deviations. At its meeting of 8-9 June 2015, the Governing Board endorsed a proposal by the Director to implement an Enterprise Resources Planning (ERP) system within two years.
- F4E has developed a system (Contract Tracker) to manage all the amendments made to contracts under implementation, and to report on deviations and cost impact.
- The system to provide information on the value of the degree of the implementation of activities (Earned Value Management) is under discussion with ITER IO with a view to improving the distribution of credit milestones during the life of a procurement arrangement (see paragraph 18).
- As regards the overall status of the action plans adopted by F4E in response to previous internal audits<sup>27</sup>, at the time of the Court's audit only five recommendations were still open<sup>28</sup>.

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<sup>25</sup> The low implementation rate for individual commitments is explained by the overall delays affecting the ITER project.

<sup>26</sup> The initial budget available for payment appropriations, adopted on 3 December 2014, was 645,09 million euro. It was reduced to 526,08 million euro in the amending budgets of 9 June and 2 December 2015.

- In 2015 the Joint Undertaking's Internal Audit Capability (IAC) completed two engagements, – of neutral beam systems and cryoplat systems. The IAC also performed three follow-up engagements on audits<sup>29</sup> for which all recommendations had been formally closed.
- In 2015 the European Commission's Internal Audit Service (IAS) performed a follow-up of its limited review on the competitive dialogue procedure for the procurement of Tender Batch 03 (Tokamak Complex), conducted in 2013. The IAS acknowledged the efforts made by F4E to implement the recommendations aiming at improving the procurement process in general. Two recommendations remained open<sup>30</sup>. The IAS also followed up the outstanding recommendations of its audit of procurement arrangements, conducted in 2012. It concluded that, of the nine recommendations still outstanding after the first follow-up in 2014, seven had been adequately implemented; the other two would be reassessed through a new engagement on the implementation of procurement arrangements<sup>31</sup>.

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<sup>27</sup> Internal audits on financial circuits, grant management, expert contracts, operational pre-procurement activities, procurement in the area of ITER buildings, selection and recruitment, monitoring of contract implementation in the area of ITER buildings, preparation of procurement arrangements, a review of the competitive dialogue procedure for the procurement of Tender Batch 03 (Tokamak Complex) and a limited review on contract management.

<sup>28</sup> One recommendation from the audit of procurement in the area of ITER buildings, two from the review of the competitive dialogue procedure for the procurement of Tender Batch 03 and two from the limited review on contract management.

<sup>29</sup> Follow-up of the audits on grant management, operational pre-procurement activities and financial circuits.

<sup>30</sup> Recommendation 5 "improve documentation of public procurement" (rated important) and recommendation 6 "ensure adequate acceptance of deliverables contributed by third parties assisting the procurement" (rated very important).

<sup>31</sup> Recommendation 7 "adopt and implement a Cost Estimate at Completion policy" (rated critical) and recommendation 9 "upgrade the design and content of the IT tool(s) used for planning, reporting and monitoring of the project" (rated very important).

- In 2015 the Joint Undertaking commissioned an independent assessment of F4E buildings contracts<sup>32</sup>. Among other conclusions relating to the delays and cost deviations suffered by F4E in the area of buildings (see paragraphs 13 and 14), the authors reiterated the assessment that the schedule and contingency reserve were unrealistic owing to the low maturity design of the project.
- The F4E internal corporate risk management system did not identify any new risks in 2015. Of the 16 actions identified in 2015 to address very high risks, 11 have been implemented, three are still in progress and two have yet to start.

### ***Operational procurement and grants***

21. Negotiated procedures constituted 45 % of the 84 operational tendering procedures launched in 2015 (58 % in 2014). Although the Joint Undertaking reduced the percentage of negotiated procedures in 2015, efforts are needed to increase the competitiveness of its operational procurement procedures. For grants, the average number of proposals received was 1,4 per call.

22. The Court audited five operational procurement procedures. Significant progress has been achieved in the updating of cost estimates when procurement procedures are launched. However, the following weaknesses were identified:

- In one case, the EAC<sup>33</sup> was 21 % higher (4,7 million euro in 2008 values) than the budget allocated to the contract at the time the procedure was launched. In another case there was a 20 % increase (11,9 million euro in 2008 values).
- One procurement procedure was only completed eight months after the date set out in the procurement strategy. One of the reasons was a three-month delay in completing

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<sup>32</sup> Independent Project Assessment of the ITER buildings (September-November 2015), presented to F4E Governing Board in December 2015.

<sup>33</sup> F4E defines the EAC as the expected total cost of a scheduled activity, a work breakdown structure component, or the project when the defined scope of work is completed. The cost estimate applied is EAC50: "the cost value for which there is a 50 % likelihood that the project will be realised at a cost below this figure and conversely a 50 % likelihood that it will be realised at a cost above this figure".

the tender submission procedure. Consequently, the contract was signed in October 2015 rather than February 2015, as initially planned.

- In one case, although the award notice was published in the Official Journal of the EU, F4E failed to publish a reference to the notice on its website as required by its Financial Regulation.

***Overall control and monitoring of operational procurement contracts and grants***

23. The Joint Undertaking has a system for performing audits<sup>34</sup> at contractors with the aim of checking compliance with quality assurance requirements<sup>35</sup>.

24. The overall control and monitoring of operational contracts (including financial and compliance verification) were covered by the IAC and the European Commission's Internal Audit Service in their 2015 audit plans<sup>36</sup>.

25. In 2015, F4E performed ex-post audits on three beneficiaries of grants it had awarded<sup>37</sup>. While F4E is taking the necessary action to correct the identified errors<sup>38</sup>, a residual error

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<sup>34</sup> Of the 19 quality audits carried out during 2015, 15 were completed by April 2016, three remained open and one was cancelled. The audits identified 33 situations of non-conformity with the procedures and 127 areas for improvement.

<sup>35</sup> The audits cover the quality plan, any situations of non-compliance with a specific requirement), purchase control and subcontracting management, documentation and data management, changes and deviations management, the civil works quality control plan, the detailed project schedule, contract risk management and the technical works quality control plan.

<sup>36</sup> See paragraph 20, third and fourth indents.

<sup>37</sup> The nine grants checked (three for each beneficiary) came to a total of 1 million euro, representing 5 % of all grant beneficiaries and 1,4 % of the total value of signed grant agreements (66 beneficiaries as at April 2016 for a total committed amount of 76 million euro since F4E was established). The financial impact of the detected errors was 26 000 euro in favour of the Joint Undertaking.

<sup>38</sup> Either by offsetting the amount or by issuing a debit note.

rate has not been calculated due to the small number of ex-post audits carried out so far<sup>39</sup> and the low impact of the grants awarded by F4E on its total budget<sup>40</sup>.

## **OTHER MATTERS**

### ***Anti-Fraud Strategy***

26. On 8-9 June 2015, the F4E Governing Board adopted an Anti-Fraud strategy and corresponding action plan. On 9 December 2015 the Joint Undertaking also adopted a Decision on Whistleblowing Rules. At the time of the Court's audit (April 2016), most of the actions had been implemented and communication was in place, as well as training for all departments of the Joint Undertaking.

### ***Legal framework***

27. The new Financial Regulation applicable to the general budget of the EU<sup>41</sup> was adopted on 25 October 2012 and took effect on 1 January 2013<sup>42</sup>. The framework financial regulation for the bodies<sup>43</sup> referred to in Article 208 of the new Financial Regulation entered into force on 8 December 2013.

28. On 2 December 2015, the F4E Governing Board finally amended its Financial Regulation and Implementing Rules to align them with the new EU Financial Framework. In February 2016, the European Commission issued a positive opinion on the amendments introduced by F4E in its financial rules, but requested the Joint Undertaking to consider further developing certain provisions in its Implementing Rules relating to specific

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<sup>39</sup> Five beneficiaries and a total audited amount of 5,7 million euro, representing 7,5 % of both total beneficiaries and total signed grant agreements since F4E inception.

<sup>40</sup> 1,7 % of the 4,4 billion euro in total budget commitments at 31 December 2015 since inception (see Annex I to the 2015 Budgetary and Financial Management Report).

<sup>41</sup> Regulation No 966/2012 of the European Parliament and of the Council (OJ L 298, 26.10.2012, p. 1).

<sup>42</sup> Article 214 of Regulation No 966/2012 with the exemptions referred to.

<sup>43</sup> Commission Delegated Regulation (EU) No 110/2014 on the model financial regulation for public-private partnership bodies (OJ L 38, 7.2.2014, p. 2).

derogations from the EU Financial Regulation and from the framework financial regulation applicable to the Article 208 bodies<sup>44</sup>.

29. The new F4E Financial Regulation and Implementing Rules entered into force retroactively on 1 January 2016. The new procurement and grant rules entered into force on 1 June 2016. F4E is currently revising those of its working procedures and processes that are affected by the new requirements.

### ***Annual activity report***

30. The Chair of F4E Governing Board refers in the 2015 annual activity report of the Joint Undertaking to the cost overruns and delays suffered by the ITER project so far and the expectations to have a new budget and schedule in place by the end of 2016. In addition, the F4E Director confirms that the system of internal control is being further enhanced in order to appropriately mitigate the risks observed by the Court, in particular concerning the amount of the Joint Undertaking's contribution to the construction phase of the ITER project<sup>45</sup>.

## **FOLLOW-UP OF PREVIOUS OBSERVATIONS**

### ***Intellectual property rights and industrial policy***

31. The Decision on the implementation of the Fusion for Energy Industrial Policy and the Policy on Intellectual Property Rights and dissemination of information was adopted by the Joint Undertaking's Governing Board on 27 June 2013.

32. The Joint Undertaking has developed a procurement strategy document for each procurement action. A checklist for monitoring the implementation of the procurement

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<sup>44</sup> In particular: the criteria for establishing whether a legal commitment may be made before a budgetary commitment (Article 70(2) FR); the criteria for concluding contracts with ITER IO, domestic agencies or Member States hosting ITER IO or F4E without a public procurement procedure (Article 85b FR); the conditions justifying departing from the three-year maximum duration of contracts for additional deliveries under Article 85e FR; and the rules on the establishment by the Governing Board of a list of organisations to which grants may be awarded without a call for proposals, as well as the subsequent use of that list (Article 90c FR).

<sup>45</sup> Annual Report concerning the financial year 2014, paragraph 27 (OJ C 422, 17.12.2015).



strategy as regards the ownership of the foreground for each procurement action has been drawn up.

33. At the time of the audit (April 2016), F4E had implemented the majority of the provisions in the Governing Board Decision of 27 June 2013, though five were not yet fully implemented<sup>46</sup> and three were still pending<sup>47</sup>. An impact assessment on the implementation of these policies is planned but has not yet been carried out.

### ***Host State agreement***

34. According to the Host State Agreement signed with the Kingdom of Spain on 28 June 2007, permanent premises should have been made available to the Joint Undertaking by June 2010.

35. Following contacts between F4E and the Spanish Government, a formal offer was presented to the Joint Undertaking on 10 March 2015. In December 2015, the Host State informed the F4E Governing Board that the discussions at ministerial level to formalise the offer of 10 March 2015 had not been concluded, and offered instead to start negotiations with the owner of the building where F4E is currently located with a view to making it the permanent headquarters of the Joint Undertaking. At the time of the audit (April 2016) this new proposal was under examination by the Joint Undertaking.

### ***Rules implementing the Staff Regulations***

36. During 2015, the Joint Undertaking continued with its adoption by analogy of several EU rules implementing the Staff Regulations<sup>48</sup>. However, certain specific rules for the implementation of the Staff Regulations still remain to be adopted<sup>49</sup>.

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<sup>46</sup> Guidelines on financial compensation for participation in a competitive dialogue.

<sup>47</sup> Extended waiver from nuclear liabilities; transition to mostly performance-based procurements; explore the possibility of a two-stage competitive dialogue.

<sup>48</sup> In particular as regards recruitment, pensions, remuneration and allowances, working conditions, medical expenses, ethics and conduct, recruitment and staff assigned outside the EU.

This Report was adopted by Chamber IV, headed by Mr Baudilio TOMÉ MUGURUZA, Member of the Court of Auditors, in Luxembourg at its meeting of 18 October 2016.

*For the Court of Auditors*

Klaus-Heiner LEHNE

*President*

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<sup>49</sup> *Inter alia* on recruitment of temporary agents, use and engagement of contract staff, the procedure for the appraisal and promotion of officials, disciplinary proceedings and administrative inquiries.

Annex**European Joint Undertaking for ITER and the Development of Fusion Energy (Barcelona)****Competences and activities**

|   |  |
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| <p><b>Areas of Union competence deriving from the Treaty</b></p> <p><i>(Articles 45 and 49 of the Treaty establishing the European Atomic Energy Community)</i></p>                         | <p>Chapter 5, on 'Joint Undertakings', of the Treaty establishing the European Atomic Energy Community, and in particular:</p> <p style="text-align: center;">Article 45</p> <p><i>"Undertakings which are of fundamental importance to the development of the nuclear industry in the Community may be established as Joint Undertakings within the meaning of this Treaty, in accordance with the following Articles ..."</i></p> <p style="text-align: center;">Article 49</p> <p><i>"Joint Undertakings shall be established by Council decision. Each Joint Undertaking shall have legal personality."</i></p>  |
| <p><b>Competences of the Joint Undertaking</b></p> <p><i>(Council Decision 2007/198/Euratom, amended by Council Decision 2013/791/Euratom and by Council Decision/Euratom 2015/224)</i></p> | <p><b>Objectives</b></p> <ul style="list-style-type: none"> <li>– To provide the contribution of the European Atomic Energy Community (Euratom) to the ITER International Fusion Energy Organisation;</li> <li>– to provide the contribution of Euratom to Broader Approach activities with Japan for the rapid realisation of fusion energy;</li> <li>– to prepare and coordinate a programme of activities in preparation for the construction of a demonstration fusion reactor and related facilities, including the International Fusion Materials Irradiation Facility (IFMIF).</li> </ul> <p><b>Tasks</b></p> <ul style="list-style-type: none"> <li>– Oversee preparation of the ITER project site;</li> <li>– provide components, equipment, materials and other resources to the ITER Organisation;</li> <li>– manage procurement arrangements vis-à-vis the ITER Organisation and, in particular, associated quality assurance procedures;</li> <li>– prepare and coordinate Euratom's participation in the scientific and technical exploitation of the ITER project;</li> <li>– coordinate scientific and technological research and development activities in support of Euratom's contribution to the ITER Organisation;</li> <li>– provide Euratom's financial contribution to the ITER Organisation;</li> <li>– arrange to make human resources available for the ITER Organisation;</li> </ul> |

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|   | <ul style="list-style-type: none"> <li>– interface with the ITER Organisation and carry out any other activities in furtherance of the ITER Agreement.</li> </ul>   |
| <b>Governance</b>   | <p><b>Governing Board, Director and other bodies</b></p> <p>The Governing Board is responsible for the supervision of the Joint Undertaking in the pursuit of its objectives and ensures close collaboration between the Joint Undertaking and its members in the implementation of its activities. Together with the Governing Board and the Director, who is the chief executive officer responsible for the day-to-day management of the Joint Undertaking and its legal representative, the Joint Undertaking has several bodies:</p> <p>Bureau, Technical Advisory Panel, Procurement and Contracts Committee, Administration and Management Committee, Audit Committee, Internal Review Panel.</p> <p><b>Internal auditor:</b> internal audit capability and the European Commission's Internal Audit Service (IAS) since 1 January 2012.</p> <p><b>External auditor:</b> European Court of Auditors.</p> <p><b>Discharge authority:</b> the European Parliament, on a recommendation from the Council.</p> |
| <b>Activities and services provided in 2015</b>   | <p>For detailed information concerning the activities and services provided in 2015, please consult the F4E website at <a href="http://www.fusionforenergy.europa.eu/">http://www.fusionforenergy.europa.eu/</a></p>  |
| <p><i>Source:</i> European Joint Undertaking for ITER and the Development of Fusion Energy.</p> |   |

## THE JU'S REPLY

**14.** The updated cost Estimate at Completion (EAC) for the direct expenses for the construction of the ITER Project was reported in F4E's 2015 Report to the Council of the European Union. However, it has to be noted that the preliminary figure reported did not include the cash contributions to the ITER Organization (IO) beyond 2020. The reason for the uncertainty about the required level of the IO cash contributions is that the IO was still working on the revised ITER schedule and its resource requirements which at that time were not approved by the ITER Council.

During 2016, F4E worked closely with the ITER IO to focus resources on the activities required to reach the First Plasma (FP) milestone.

At the same time, a new schedule for a phased planning of ITER operations was developed by the ITER IO. The latter was reviewed by an independent expert group appointed by the ITER Council and an updated ITER schedule up to the FP in December 2025 was approved ad-referendum<sup>50</sup> by the ITER Council in June 2016.

While the EAC for the direct expenses of F4E for the construction of the ITER project according to the new schedule remains substantially unchanged compared to the estimates reported in December 2015, the work carried out together with ITER Organization will make possible to determine with more confidence the level of the IO cash contributions beyond 2020.

Furthermore, F4E has made an estimate of its indicative funding requirements for the completion of the construction phase, and presented this to the Governing Board in June 2016. This estimate is being further refined in view of the ITER Council meeting in November 2016.

Finally, the Commission is preparing a Communication to the Council and Parliament on the way to progress the ITER Project, requesting a mandate on the position the European Union will take in the ITER Council meeting of November 2016.

**16.** While many of the actions laid down in the 2015 ITER and F4E Actions Plans are specific, there are several which are related to continuous improvement and are of an ongoing nature.

Out of the six main groups of actions in the 2015 ITER Action Plan, four have been completed and two are ongoing. F4E has reviewed the 2015 action plan in the light of the decisions taken by the ITER Council in June 2016, and considers that the plan is substantially unaffected.

In addition, the new F4E Director, upon the request of the Governing Board, is preparing an Improvement Plan which includes the elements of the 2015 action plan which are still being implemented together with the new priorities that have arisen during 2016, including among others the Straight Road to First Plasma Project.

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<sup>50</sup> The approval ad referendum is an approval process that is subject to the authorisation of the corresponding needed budgetary resources by the corresponding budgetary and/or financial authority (Budgetary Authority).

## Fusion for Energy

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**18.** As for the value of work in progress, F4E uses the amount of achieved ITER credit versus the forecast ITER credit value. F4E is in discussion with ITER IO to agree a credit distribution profile more closely aligned with the progress on each Procurement Arrangement.

**19.** The delays in the ITER project have required the ITER parties to adopt a new baseline which defined the First Plasma date as December 2025. The delays have directly affected both individual commitments and payments at F4E, with a final percentage of execution lower than expected at the beginning of the year. With the adoption of a more realistic schedule, the budget planning and implementation will be improved and match more closely the milestones F4E will have to deliver.

### **20. Central and uniform Data Monitoring and Control System**

In 2015 the F4E Governing Board was informed about the possible implementation of an information system. During the following months preparatory activities were carried out assessing the “as is” status of F4E Information Systems, data quality and process maturity.

At the beginning of 2016, upon the taking-up of duties of the new Director, an external assessment was carried out, which included an impact study as well as a cost-benefit analysis of various options.

F4E was advised that the most cost-effective and lowest risk approach would be the step-by-step introduction of appropriate IT tools for cost management. In order to ensure the achievement of the desired improvements to the planning and controlling of costs, an overall data model will be used as the basis to integrate the various IT applications. This will enable the integration of data stemming from the existing modules in Project Management, Deviation Control, a database for the estimate-at-completion and the fund allocation table for the various projects of F4E. F4E has started to implement these recommendations of the external assessment.

### **Contract Tracker**

F4E has indeed implemented Contract Tracker, a documentation exchange portal with the suppliers. It allows the project teams to monitor and control the contract deliverables. When coupled with the Primavera Scheduling platform, milestones and overall project progress can also be monitored. This system is already in its third generation and is adopted for all new contracts.

In 2015, F4E also decided to develop a Deviation and Amendment to Contracts tool, to handle all contract changes. This tool was developed during 2015, tested in 2016 and its two main modules (F4E deviation towards Supplier and Supplier Deviation) started to be disseminated in July 2016.

The Deviation and Amendment to Contracts tool covers the execution of the deviation process, including the correct recording of the financial impacts, the verification of the budget availability before creating a commitment and the connection with the Reserve Fund. It is connected to the Contract Tracker platform, so that for a given contract all Deviations and its status can be visualized by F4E and the Supplier.

### **EVM**

As for the value of work in progress, F4E uses the amount of achieved ITER credit versus the forecast ITER credit value (see reply to paragraph 18)

### **Implementation of internal audits**

[F4E reply](#)

## Fusion for Energy

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As of June 2016 F4E implemented all of the internal audit action plans. This was achieved thanks to the strong focus put by F4E management in this particular area of concern, which was noted by the F4E Audit Committee of June 2016.

### IAC reports

The two engagements in Neutral Beam Systems and Cryoplant Systems were completed in June 2016. The audit on Contracts in the Area of Cryoplant and Fuel Cycle resulted in 7 recommendations issued by the IAC, 6 of which were accepted by F4E management (2 Very Important, 2 Important and 2 Desirable). The audit on Contracts in the Area of Neutral Beam and Electron Cyclotron Power Supplies and Sources resulted in 15 recommendations, 13 of which were accepted by F4E Management (5 Very Important and 8 Important).

Both reports and the respective action plans proposed by F4E management were discussed and positively noted in the Audit Committee of June 2016.

### IAS reports

The IAS performed a second follow up of its limited review on the competitive dialogue procedure for the procurement of Tender Batch 03, to review the two actions which had not been closed during the first follow up. In its final report of 15 June 2016, it acknowledged that for those two recommendations, F4E had recently designed appropriate mitigating actions.

As the actions were recently implemented, the effectiveness of the measures taken could not be assessed during the IAS visit and will be reassessed in the second part of 2016 in view of closing the recommendations.

The IAS engagement on the Implementation of Procurement Arrangements, for which the fieldwork took place in the first week of October 2015, is being finalized. F4E received an advance draft report on 7 June 2016 and the exit meeting closing this audit took place with the F4E Director on 8 July. No critical recommendation was reported in the preliminary draft.

### Corporate Risk Management

As of June 2016 when the last update was carried out and presented to the F4E governance bodies, there are only 3 very high risks that are closely monitored by F4E Senior Managers. These 3 risks are being mitigated through 7 actions. During the update of June 2016 F4E identified 5 new actions on top of the 2 existing ones which are taking more time to implement than initially planned.

F4E stresses that managing corporate risks is a continuous process and part of the F4E control environment.

**21.** F4E is seeking to reduce the use of negotiated procedures as far as possible. However, the high-tech research-oriented nature of the activities related to the ITER Project is such that limited competition is regrettably frequent.

Most opportunities that were in F4E's hands to increase competition and industrial engagement have been pursued. Exchange of information with similar, first of a kind high-tech frontier projects in Europe shows several commonalities and shared concerns in this area.

### F4E reply

## Fusion for Energy

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A forum for discussion was initiated with several European organizations in order to develop a common strategy maximising return for all the players.

**22.** F4E is of the opinion that the comments raised by the ECA on the procurement procedures selected respond to the following reasons:

### EAC

The value indicated in the allocated budget field did not include any contingency for the risks but only the scope. The EAC50 was done at a later stage and it takes in account uncertainties and risks that may materialise or not during the Contract implementation.

### Delay in one procurement procedure

The three-month delay was mostly caused by the extension of the date for submitting tenders and the extension of the period for clarification of the expressions of interest and tenders.

### Failure to publish a reference to the award notice at F4E website

A mistake occurred in the award publication process. The award notice was correctly published in the Official Journal, which constitutes the legal reference for publication, while the website publication is a complementary channel.

**28.** F4E plans to insert such provisions in its implementing rules, following consultation with the Commission, by the end of 2016.

**29.** The new requirements have been translated into the F4E working procedures (policies, processes, procedures, etc.).

**30.** F4E is continuously enhancing its internal control by focussing resources on the ITER deliveries required for the First Plasma milestone while respecting the capped budget until 2020.

Actions are also underway in F4E to optimise the allocation of human resources to priority areas and in collaboration with the ITER Organization to freeze the designs and Interfaces as far as possible, as this has been a major cost driver in the past. A project cost control system is being developed to better monitor the evolution of the costs and to manage all the contract changes.

F4E has also enhanced the monitoring of the project progress and its deliverables (achievement of key milestones, implementation of budget against plan, etc.) through the creation of the Project Management, Infrastructure and Control Department and the introduction of monthly Project Steering Meetings.

Finally, the structure for ownership and responsibility has been further enhanced as of October 2016 with the creation of a new department that is focusing on commercial and financial issues. The Senior Management team will be reinforced. Further organizational and process streamlining is being implemented in the coming months.

**32.** The Single Intellectual Property (SIP) document is adopted and in use since several months. In order to formalize SIP use, it was included as an explicit step in all new processes for procurement procedures under the new FR/IR, which were revised and updated in April-June 2016.

### [F4E reply](#)



**33.** F4E has completed the action plan and has implemented 28 out of the 32 actions. Four actions were cancelled: one became obsolete, one was superseded by project developments and two were cancelled after unsuccessful negotiation with stakeholders. An impact assessment of F4E's activities (and the ITER project as a whole) will be performed by the Commission during 2016-2017.

**35.** After the Spanish Ministry acknowledged that the previously proposed building could not provide the necessary working space for F4E staff in the Barcelona headquarters, they started negotiations for a new contract in the existing building.

F4E received a formal offer for the existing building from the Ministry on 15 April 2016. This offer consisted of a long-term lease agreement for the current premises and an extension of the current office space by approximately 1,000 m<sup>2</sup>.

On 28 April, this offer was presented and welcomed by the Bureau of the F4E Governing Board. On 17 May, the Ministry transmitted to F4E the new contract lease, already signed by the building owner.

On 24 May, F4E Director signed the offer and on 8 June, the Ministry transmitted it back to F4E, signed by the Spanish Secretary of State for Research, Development and Innovation.

In its meeting at the end of June 2016, the Governing Board of F4E took note of the conclusion of the long-term lease agreement for the F4E offices between the Kingdom of Spain and the building owner and endorsed the plans to refurbish the office space attributed to F4E.

**36.** In line with Article 110 of the Staff Regulations and in due respect with the deadlines established by the latter, F4E adopted and approved the following implementing rules in the course of 2015 and the first half of 2016:

- use and engagement of temporary agents,
- appraisal of officials, temporary agents and contract agents,
- unpaid leave,
- promotion,
- reclassification of temporary agents,
- reclassification of contract agents,
- part time work,
- telework,
- working time.

The remaining implementing rules are either pending adoption of model decisions applicable to agencies and joint undertakings by the European Commission or under review with the European Commission.