

## **Patent Cooperation Treaty (PCT) Working Group**

**Seventh Session  
Geneva, June 10 to 13, 2014**

### **NEW WIPO STANDARD ON THE PRESENTATION OF NUCLEOTIDE AND AMINO ACID SEQUENCE LISTINGS USING EXTENSIBLE MARKUP LANGUAGE (XML)**

*Document prepared by the International Bureau*

1. The Annex to this document reproduces the main body and Annex I to document CWS/4/7, to be considered by the Committee of WIPO Standards (CWS) at its fourth session, scheduled to take place in Geneva from May 12 to 16, 2014.
2. Document CWS/4/7 invites the CWS to consider and adopt a new WIPO Standard “WIPO Standard ST.26 – Recommended standard for the presentation of nucleotide and amino acid sequence listings using XML (eXtensible Markup Language)”. The proposed Standard, reproduced in Annex II to document CWS/4/7 and document CWS/4/7 Add., has been prepared by the SEQL Task Force led by the European Patent Office and established by the CWS at its first session in October 2010.
3. Document CWS/4/7 also invites the CWS to request the Task Force to prepare a proposal for the transition from WIPO Standard ST.25 to the new WIPO Standard ST.26, for consideration and approval by the CWS at its fifth session, expected to take place in 2015. In preparing the proposal, the Task Force will liaise with the appropriate PCT bodies with regard to the impact of new WIPO Standard ST.26 on Annex C to the Administrative Instructions under the PCT, which contains the substantive provisions of WIPO Standard ST.25.
4. The International Bureau will report orally to the Working Group on the outcome of discussions of document CWS/4/7 at the fourth session of the CWS.

5. *The Working Group is invited to note the contents of the present document.*

[Annex follows]

COMMITTEE ON WIPO STANDARDS (CWS)

FOURTH SESSION, GENEVA, MAY 12 TO 16, 2014

NEW WIPO STANDARD ON THE PRESENTATION OF NUCLEOTIDE AND AMINO ACID SEQUENCE LISTINGS USING EXTENSIBLE MARKUP LANGUAGE (XML)  
(reproduced from document CWS/4/7)

1. The Committee on WIPO Standards (CWS), at its first session held in October 2010, agreed to create Task No. 44 for the preparation of recommendations on the presentation of nucleotide and amino acid sequence listings based on eXtensible Markup Language (XML) for adoption as a WIPO standard. The CWS also decided to establish a task force to handle this Task (SEQL Task Force). The European Patent Office (EPO) was designated as the Task Force Leader. (See paragraphs 27 to 30 of document CWS/1/10, Task No. 44 in document CWS/3/12, the description of the Task is also provided in Annex I to the present document.)
2. Following the above decision by the CWS, representatives of 13 industrial property offices (IPO) and the International Bureau were nominated to participate in the Task Force. At its second and third sessions, the CWS noted the information that the EPO, in its capacity of the Task Force Leader, provided on the status of the SEQL Task Force discussion, including the work plan for preparation of the recommendations. (See documents CWS/2/5 and CWS/3/6.)
3. After the third session of the CWS, the SEQL Task Force continued its discussion in the Wiki forum. The report prepared by the Task Force Leader on the work carried out by the Task Force is reproduced in Annex I to the present document.
4. Following the above-mentioned request by the CWS, the SEQL Task Force has prepared a proposal of a new standard for consideration and approval by the CWS. The proposed name of the new standard is “WIPO Standard ST.26 – Recommended standard for the presentation of nucleotide and amino acid sequence listings using XML (eXtensible Markup Language)”. The draft new WIPO Standard ST.26, which contains the main body and five annexes, is reproduced in Annex II to the present document.
5. The SEQL Task Force was also requested by the CWS to liaise with the appropriate PCT body with regard to the possible impact of new Standard ST.26 on Annex C to the Administrative Instructions under the PCT (see paragraph 29(c) of document CWS/1/10). Provisions related to the transition from WIPO Standard ST.25 to the new WIPO Standard ST.26 are currently under discussion by the Task Force members. It is planned to present them for consideration by the CWS at its next session to be held in 2015 (see paragraph 10 “Roadmap” in Annex I to the present document).
6. IPOs are requested to postpone the preparations for implementation of the new WIPO Standard ST.26 until said provisions on the transition are approved by the CWS. Meanwhile, Standard ST.25 should continue to be used. Having this in mind, on the condition that the new standard is adopted at the present (fourth) session of the CWS, the Task Force proposes to include the following Editorial Note to the new standard:

*“Editorial Note by the International Bureau*

“The CWS agreed to ask industrial property offices to postpone the preparations for implementation of this new WIPO Standard ST.26 until the recommendations for the transition from WIPO Standard ST.25 to the new Standard ST.26 is agreed on by the CWS at its fifth session to be held in 2015. Meanwhile, Standard ST.25 should continue to be used.

“The Standard is published for information purposes of industrial property offices and other interested parties.

“The Committee on WIPO Standards (CWS) adopted the present standard at [its fourth session on May 16, 2014].”

7. *The CWS is invited to:*

*(a) note the status report on the work of SEQL Task Force provided in Annex I to the present document;*

*(b) adopt “WIPO Standard ST.26 – Recommended standard for the presentation of nucleotide and amino acid sequence listings using XML (eXtensible Markup Language)” as the name of the proposed standard;*

*(c) consider and adopt WIPO Standard ST.26, as reproduced in the Annex II to the present document;*

*(d) consider and approve the Editorial Note to be included in WIPO Standard ST.26 (see paragraph 6, above); and*

*(e) request the SEQL Task Force to prepare a proposal for the transition provisions, as referred to in paragraph 5, above, and present them for consideration and approval by the CWS at its fifth session.*

[Annexes (to document CWS/4/7) follow]

ANNEX I (to document CWS/4/7)

## **REPORT ON THE PREPARATION OF A NEW WIPO STANDARD ON THE PRESENTATION OF NUCLEOTIDE AND AMINO ACID SEQUENCE LISTINGS USING EXTENSIBLE MARKUP LANGUAGE (XML)**

*Document prepared by the European Patent Office (EPO)*

### BACKGROUND

1. The Task Force on Sequence Listings was created by the Committee on WIPO Standards (CWS), at its first session (October 25 to 29, 2010), to deal with Task No. 44 (see paragraph 29 of document CWS/1/10):

“Prepare a recommendation on the presentation of nucleotide and amino acid sequence listings based on eXtensible Markup Language (XML) for adoption as a WIPO standard. The proposal of the new WIPO standard should be presented along with a report on the impact of the said standard on the current WIPO Standard ST.25, including the proposed necessary changes to Standard ST.25.”

2. The Task Force was also requested:

“To liaise with the appropriate PCT body with regard to the possible impact of such standard on Annex C to the Administrative Instructions under the PCT.”

3. The European Patent Office (EPO) was assigned the role of Task Force Leader and has since then held six rounds of discussions on WIPO's Wiki and submitted a final draft for public consultation. The principle of differentiating the technical aspects of ST.25 from Annex C (PCT Administrative Instructions) was agreed upon at the eighteenth session Meeting of International Authorities in February 2011 (see paragraphs 88 to 92 of document PCT/MIA/18/16) and at the fourth session of the PCT Working Group in June 2011 (see paragraphs 180 to 188 of document PCT/WG/4/17).

4. On the basis of the comments received from the Task Force members, a final round of discussions was held in order to achieve a common agreement on the Standard requirements.

### PROGRESS REPORT

5. The Task Force started operating in February 2011 on the basis of drafts prepared by the EPO. Many Offices participated in the process and posted useful comments on WIPO's related Wiki.

6. In March 2012, the Task Force finalized a draft of the standard that could be used by the offices to consult their respective public. Several significant issues were raised by public comments and they have been tackled in cooperation with the database providers DDBJ, EBI, NCBI.

7. The sixth round of discussions was finished on September 2013 and the draft incorporating the improvements resulting from the public consultation and further discussions among the Task Force members and Database providers, was posted on WIPO's wiki for a final review.

8. On the basis of the comments received from the Task Force members, a final round of discussions took place aimed at achieving a common agreement on the Standard requirements. On a provisional basis, the Task Force named this Standard ST.26. The main body and annexes proposed by the Task Force for consideration and approval of the CWS introduce the following improvements when compared to the current ST.25:

(a) All (PCT) procedural issues are transferred to the PCT Administrative Instructions: the new standard is focused on technical aspects, thus to enable an optimal presentation of the sequence listings (the biotech-related part) and the appropriate format of the submission (namely XML);

(b) The biotech-related part has been considerably improved to reflect modern industry standards, for example:

- inclusion of modified nucleotides and amino acids not previously provided for (e.g. D-amino acids, PNA, morpholinos etc.) which have gained importance in industry and need to be electronically searchable;
- clear instructions for gapped sequences and sequence variants;
- clarification with regard to features and annotations;
- consistency with latest public biological sequence repositories consortia requirements (INSDC and UniProt); and
- the XML definition is self-contained and independent of ST.36 or ST.96.

(c) The syntax provided by the Document Type Definition (DTD) used in the ST.26 increases the data accuracy and enables automatic data quality control.

9. The Task Force will continue to work on the transition aspects in 2014 and 2015 with the objective to submit for the consideration and approval of the CWS, at its fifth session, the recommendations for the transition from ST.25 to ST.26.

#### ROADMAP

10. A new round of discussions will continue after the CWS/4 session, focused on the preparation of the recommendations for the transition phase to be presented at the CWS session in 2015.

*[Annex II to document CWS/4/7, presenting the draft new WIPO Standard ST.26, is not reproduced here]*

[End of Annex and of document]