# categories from the survey results on Ict strategy recommendations

## category A

R07: Explore the possibility of AI-powered automatic classification tools to enhance the use of, and control the quality of, classification symbols allotted to IP applications.

R04: In addition to bibliographic data such as names of applicants, the full text of patent specification should be converted into, or generated at the source, to make patent applications searchable. Consider common tools or at least closer WIPO Standards for the preparation of XML from word processor formats to ensure consistency.

R23: IPOs are encouraged to provide their authority file or the link to their website of authority file to the IB.

## category B

R05: Image data and complex elements such as image of a device trademark, an industrial design and graphs contained in IP applications should be generated as machine-searchable data in accordance with relevant WIPO Standards (in particular WIPO Standard ST. 96).

R06: Re-engineer and transform the current business models and workflow processes based on paper transactions into modernized and optimized business models and workflow processes based on digital IP data transactions, with collaboration of business, ICT and legal representatives at all stages.

R01: Develop an online data exchange protocol covering key common transactions to generate high quality IP data at the source, based directly from output from IP management systems, with a view to create and exchange IP data with IPOs and the IB in accordance with WIPO Standards.

R02: In introducing an online data exchange protocol, implement appropriate policies and consider ICT systems in use by IP applicants and IP agents to facilitate their use of the protocol to submit high quality IP data.

R16: The application body formats for WIPO Standard ST.36 and ST.96 should be carefully analyzed and recommendations made for more specific, practical forms of implementation than the general standards (which allow for an enormous number of options) which meet all the needs for patent processing and allow reliable two way transformations between the two.

R27: Encourage the wider use of existing standardized data exchange mechanisms, promote wider use of electronic filing and prioritize creation of additional electronic forms to improve the quality and reliability of data received from applicants, thereby reduce the errors caused by data content and format inconsistencies.

R20: IPOs and the IB should agree formats for packages (for PCT, this could be based on the existing PCT Annex F packages), which can be readily prepared by third party software (also including export of a filed application from another IPO) and pushed to Office servers to prepopulate most of a draft application prior to completion in an online filing system.

R28: Establish a self-service, centralized transaction processing model wherein users and IPOs connect to a central IB platform for data services. This will change the paradigm from one based around batch transmission of forms and responses to one of real-time updates to the International Register entered directly by the parties concerned.

R40: Explore the possibility of global joint projects to capitalize on common interests and synergy of IPOs.

R19: IPOs and the IB should agree PLT-compatible bibliographic/description data packages for use in their online filing systems, together with a common method of coding Office-specific sections, allowing more effective reuse of bibliographic/description data from previously filed applications and development of third party IP management systems to deliver bibliographic/description data without the need for conversion or retyping.

R31: IPOs should continue and expand their use of standard grounds of refusal.

R21: IPOs should participate in WIPO projects to use global common tools and platforms to which ICT systems of IPOs should be connected, such as WIPO CASE, WIPO global portal of IP registries, and provide IP data in accordance with relevant WIPO Standards.

## category C

R14: The IB and IPOs should begin consultations on a standardized model for data exchange for the traditionally bilateral paper exchanges in the PCT, taking into account investments in assuring security requirements are optimized.

R32: The quality of exchange between IPOs and with the IB would be improved if IPOs move to using WIPO Standard ST96 for Hague-related XML components.

R11: IPOs should share information on ICT solutions for records management, in particular on the appropriate use of standard ICT packages and the solutions for guaranteeing authenticity of digital records, signatures, etc.

R29: Promote wider sharing of data concerning terms of goods and services that are acceptable or not by IP Offices to further reduce the need for costly and time-consuming processes (irregularity and refusal processes).

R30: Create a more comprehensive, user-friendly and machine accessible database of terms of goods and services that could reduce irregularities.

R09: Share information on emerging search technologies, especially image search, classification tools and language tools, and consider ways in which the technology can be shared and made available to smaller IPOs to improve the quality and efficiency of IP information search.

R34: IPOs are encouraged to consider participating in DAS as depositing and accessing IPOs for design priority documents, which would potentially reduce costs and risk with regard to provision of certified copies in respect of Hague international registrations.

R37: Consider standardized security mechanisms as part of the review of data exchange protocols.

R39: Share information about online services (filing, subsequent transactions, etc) with the aim of identifying common transactions and services that could be made available through APIs to enable interoperability of systems, including systems developed by third party solution providers.

R10: Develop a reference platform for online publication and search, while contributing to the international cooperation under CWS about systems for providing access to publicly available patent information of IPOs participating in the CWS Task No. 52. The platform would be linked to international and/or regional databases to automate the dissemination of information.

R22: IPOs need to share and disseminate patent information and data without any barriers and free-of-charge or at a marginal cost.

## category D

R03: Back-file capturing of IP data by OCR conversion of image data should be properly undertaken in accordance with good quality control and relevant WIPO Standards.

R25: IPOs should consider the use of WIPO DAS, particularly for processing patent and design applications.

R08: Strengthen international cooperation for internationally coherent practices of using international classifications and for the provision of technical support to make local language versions of international classifications available.

R12: In cooperation with interested Member States, the IB should develop a prototype for a distributed IP registry. The prototype could be used for IP applications to create an authentic registry of IP application numbers, for example to be used for validation of priority claims. Study the possibility of using a distributed IP registry linking to WIPO CASE or the International Register. The potential of blockchain technologies for linking such distributed registries should also be explored.

R26: Develop further a new recommendation on a signed electronic package format for priority documents, including application bodies in full text formats (where available) and bibliographic data in XML format as a part of WIPO Standards. The new format could be exchanged via WIPO DAS or directly between applicants and IPOs.

R13: IPOs to work towards increasing the degree of exchanging standardized fully XML based data with the IB, considering synchronous models such as ePCT machine to machine services.

R24: Explore the possibility of an international Fund-in-Trust voluntarily contributed by IPOs to enhance international cooperation for digitizing IP data as a global public good.

R35: Enhance international cooperation among IPOs and the IB to adhere to agreed settlement timetables, the use of web-forms for data collection and the adoption of standardized electronic filing systems.

R18: Common conversion software should be developed for the validation and conversion of major document types (initially DOCX; other formats could also be considered) into simplified XML formats. The software should be carefully version controlled, be suitable for integration into national processing systems both by local deployment and by reference to an API for centralized instances and be capable of producing either WIPO Standard ST.36 or ST.96 output in formats which allow for accurate conversion between the two at a later stage, if required. Converters for the other direction (ST.36 or ST.96 to DOCX) should be considered at a later stage if it will assist the process of effective amendment/correction of applications.

R36: Agree on an international standard for information security such as ISO/IEC 27001 as a means to demonstrate reasonable assurance of internal control effectiveness by Offices. Where Offices are required to comply with their own national information security standard, a mapping to the international standard can be provided to demonstrate a healthy information security management system. For external Cloud service providers, agree on minimum certification and independent audits against standards prescribed by the Cloud Security Alliance STAR or SSAE (ISAE) SOC II Type 2 as a means of information security assurance in the Cloud.

R15: IPOs should investigate legal and technical possibilities for identifying patent families prior to publication and ensure permission for IPOs processing family members to access search and examination reports. This recommendation should be considered in conjunction with R12 regarding the establishment of distributed registries, considering that a limited amount of information (e.g. priority references) could eventually be shared on a distributed registry prior to publication.

R17: The work on development of search and examination report standards for WIPO Standard ST.96 should not simply convert the ST.36 standard to the expectations of ST.96, but analyze whether the structures encourage easy reuse of data between stages of search and examination both with an IPO and between different IPOs.

## category E

R33: Technical issues related to the acceptance of moving images need to be considered, alongside the associated preparations with regards to integrity in terms of transmission and storage - as well as publication and sharing.

R38: Improved methods should be explored for integration with international systems and for centralized systems. Create a centralized service, as a demonstration/prototype, with open and standard APIs, for dissemination of classification and standards data and for transactional data exchange between IPOs and regional/international IP systems.

[End of Annex II and of document]