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| ITU Logo | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2017-2020 | FG-AI4H-J-200-R01 |
| **ITU-T Focus Group on AI for Health** |
| **Original: English** |
| **WG(s):** | Plenary | E-meeting, 30 September – 2 October 2020 |
| **DOCUMENT** |
| **Source:** | TSB |
| **Title:** | Updated list of FG-AI4H deliverables (as of 2020-11-16) |
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| **Abstract:** | This document informs SG16 of the current status of the planned deliverables for the ITU-T Focus Group on AI for health (FG-AI4H), based on the output list from the virtual meeting held 30 September – 2 October 2020 and subsequently by the FG-AI4H management, based on feedback from editors. It is labelled as DEL00S, although it is not itself a deliverable. Revision 1 corrects omissions from the original version. |

NOTE – Latest version of deliverables are stored in the FG-AI4H collaboration area at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>. The page will be updated after each FG-AI4H meeting.

Table 1 – Updated list of deliverables (J-005 plus updates)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) |
| 1 | AI4H ethics considerations | Andreas Reis (WHO) | [G-201](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-201.docx), [J-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-051.pptx) |
| 2 | AI4H regulatory best practices | Jackie Ma (Fraunhofer HHI, Germany), Khair ElZarrad & Rose Purcell (FDA, USA) | [J-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-055.pptx) |
| 2.1 | Mapping of IMDRF essential principles to AI for health software | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical Consultant eHealth, India), Pat Baird (Philips, USA), Thomas Wiegand (Fraunhofer HHI, Germany) | [G-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038.docx), [G-038-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038-A01.xlsx) |
| 2.2 | Good practices for health applications of machine learning: Considerations for manufacturers and regulators | Pradeep Balachandran (India) and Christian Johner (Johner Institut, Germany) | [J-039](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-039.docx), [J-039-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-038-A01.pptx) & [Nextcloud document](https://datacloud.hhi.fraunhofer.de/nextcloud/s/izz73RgE474Rq9g) |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [J-041-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-R01.docx), [J-041-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-041-A01.pptx) |
| 4 | AI software life cycle specification | Pat Baird (Philips, USA) | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx) |
| 5 | Data specification | Marc Lecoultre (MLlab.AI, Switzerland) | [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx) |
| 5.1 | Data requirements | [Marc Lecoultre (MLlab.AI, Switzerland)] | [I-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-044.docx) |
| 5.2 | Data acquisition  | Rajaraman (Giri) Subramanian (Calligo Tech, India), Vishnu Ram (India) | [G-205-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205-A02.docx) |
| 5.3 | Data annotation specification | Shan Xu (CAICT, China), Harpreet Singh (ICMR, India), Sebastian Bosse (Fraunhofer HHI, Germany) | [J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx%22%20%5Ct%20%22_blank) |
| 5.4 | Training and test data specification  | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (India) | [I-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-034.docx) |
| 5.5 | Data handling  | Marc Lecoultre (MLlab.AI, Switzerland) | [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx) |
| 5.6 | Data sharing practices | Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), WHO Data Team | [J-054](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054.docx), [J-054-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-054-A01.pptx) |
| 6 | AI training best practices specification | Xin Ming Sim and Stefan Winkler (AI Singapore) | [J-036](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-036.docx) |
| 7 | AI for health evaluation considerations | Markus Wenzel (Fraunhofer HHI, Germany) | [J-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027.docx), [J-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-027-A01.pptx) |
| 7.1 | AI4H evaluation process description | Sheng Wu (WHO) | [G-207-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-207-A01.docx) |
| 7.2 | AI technical test specification | Auss Abbood (Robert Koch Institute, Germany) | [I-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-027.docx), [J-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-050.pptx) |
| 7.3 | Data and artificial intelligence assessment methods (DAISAM) reference | Luis Oala (Fraunhofer HHI, Germany) | [I-035](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-035.docx) & [Live version](https://docs.google.com/spreadsheets/d/1u3p5QrqkArL8_tJ8I1O5_j3qYIeycYLP0TD0siWmfM4/edit?usp=sharing) |
| 7.4 | Clinical evaluation of AI for health | Naomi Lee (Lancet, UK), Eva Weicken (Fraunhofer HHI, Germany), Shubhanan Upadhyay (ADA Health, Germany) | [J-053](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053.docx), [J-053-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-053-A01.pptx) |
| 7.[5] | Assessment platform | Luis Oala (Fraunhofer HHI, Germany), Steffen Vogler (Bayer, Germany) | [I-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-037.docx) & [Git live version](https://gitlab.hhi.fraunhofer.de/fgai4h/assessment-platform) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO) and Robyn Whittaker (New Zealand) | – |
| 9 | AI4H applications and platforms | Manjeet Chalga (ICMR, India), Aveek De (CMS, India) | [J-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044.docx), [J-044-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-044-A01.pptx) |
| 9.1 | Mobile applications | Khondaker Mamun (UIU, Bangladesh), Manjeet Chalga (ICMR, India) | [I-048](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-048.docx), [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) |
| 9.2 | Cloud-based AI applications | Khondaker Mamun (UIU, Bangladesh) | [I-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-049.docx), [J-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-052.pdf) |
| 10 | AI4H use cases: Topic description documents | Eva Weicken (Fraunhofer HHI, Germany) | [J-030](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-030.docx) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [G-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-006.docx) (general) |
| 10.1A | Cardiovascular disease management (TG-Cardio), Subtopic: Cardiovascular disease (CVD) *risk prediction* *using AI* | Benjamin Muthambi (Watif Health, South Africa) | [J-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-006-A01.docx) (risk prediction) |
| 10.2 | Dermatology (TG-Derma) | Weihong Huang​ (Xiangya Hospital Central South University, China​) | [J-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [J-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Inês Sousa (Fraunhofer Portugal) | [J-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (Charité Berlin, Germany) | [J-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [J-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-014-A01.docx) |
| 10.7 | Maternal and child health (TG-MCH) | Raghu Dharmaraju (Wadhwani AI, India) and Alexandre Chiavegatto Filho (University of São Paulo, Brazil) | [J-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) | [J-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [J-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood (Robert Koch Institute, Germany) and Stéphane Ghozzi (HZI, Germany) | [J-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [J-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [J-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [J-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) | [J-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [J-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [J-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-009-A01.docx) |
| 10.17 | Dental diagnostics and digital dentistry (TG-Dental) | Falk Schwendicke and Joachim Krois (Charité Berlin, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [J-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [J-011-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-011-A01-R01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [J-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [J-025-A01-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-025-A01.docx) |
| 10.21 | AI for Musculoskeletal medicine (TG-MSK) | Yura Perov (EQL, UK) | – |

\* NOTE: The document numbers indicated reflect the status as of the end of the e-meeting J. Colour codes indicate deliverable drafting status (as of the issuance of this document) as "*active*" (green) and "*unclear whether active*" (blue). Some links provided are to slide sets; these slide sets are not meant to be the deliverable documents, but rather a status update concerning progress of the respective deliverable.

Possible future Deliverables:

| No. | Deliverable | Updated initial draft editor | Availability |
| --- | --- | --- | --- |
| – | Reference software implementation | Marc Lecoultre | [J-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-045.pptx) |
| – | Guidance on digital technologies for COVID health emergency | Shan Xu (CAICT, China), Ana Riviere-Cinnamond (PAHO)  | [J-035-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-R01.docx), [J-035-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-035-A01.pptx) |

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