|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITU Logo | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2017-2020 | | FG-AI4H-K-005 | |
| **ITU-T Focus Group on AI for Health** | |
| **Original: English** | |
| **WG(s):** | | Plenary | E-meeting, 27-29 January 2021 | |
| **DOCUMENT** | | | | |
| **Source:** | | TSB | | |
| **Title:** | | Updated list of FG-AI4H deliverables (as of 2021-01-23) | | |
| **Purpose:** | | Admin | | |
| **Contact:** | | TSB | | Tel: +41-22-730-6805 Fax: +41-22-730-5853 E-mail: [tsbfgai4h@itu.int](mailto:tsbfgai4h@itu.int) |

|  |  |
| --- | --- |
| **Abstract:** | This document summarizes 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. This summary is also available as DEL00S in the FG-AI4H Deliverables page, although it is not itself a deliverable. This document is based on J-200-R01. |

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-200-R01 plus updates)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | [Shan Xu](mailto:xushan@caict.ac.cn) (CAICT, China) | [J-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-043.docx) |
| 1 | AI4H ethics considerations | [Andreas Reis](mailto:reisa@who.int) (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](mailto:jackie.ma@hhi.fraunhofer.de) (Fraunhofer HHI, Germany), [Khair ElZarrad](mailto:mohammed.elzarrad@fda.hhs.gov) & [Rose Purcell](mailto:Rosemarie.Purcell@fda.hhs.gov) (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](mailto:luis.oala@hhi.fraunhofer.de) (Fraunhofer HHI, Germany), [Pradeep Balachandran](mailto:pbn.tvm@gmail.com) (Technical Consultant eHealth, India), [Pat Baird](mailto:pat.baird@philips.com) (Philips, USA), [Thomas Wiegand](mailto:thomas.wiegand@hhi.fraunhofer.de) (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](mailto:pbn.tvm@gmail.com) (India) and [Christian Johner](mailto:christian.johner@johner-institut.de) (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](mailto:pbn.tvm@gmail.com) (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](mailto:pat.baird@philips.com) (Philips, USA) | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx) |
| 5 | Data specification | [Marc Lecoultre](mailto:ml@mllab.ai) (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](mailto:ml@mllab.ai) (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](mailto:kinnal@hotmail.com) (Calligo Tech, India), [Vishnu Ram](mailto:vishnu.n@ieee.org) (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](mailto:xushan@caict.ac.cn) (CAICT, China), [Harpreet Singh](mailto:hsingh@bmi.icmr.org.in) (ICMR, India), [Sebastian Bosse](mailto:sebastian.bosse@hhi.fraunhofer.de) (Fraunhofer HHI, Germany) | [J-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-034.docx" \t "_blank) |
| 5.4 | Training and test data specification | [Luis Oala](mailto:luis.oala@hhi.fraunhofer.de) (Fraunhofer HHI, Germany), [Pradeep Balachandran](mailto:pbn.tvm@gmail.com) (India) | [I-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-034.docx) |
| 5.5 | Data handling | [Marc Lecoultre](mailto:ml@mllab.ai) (MLlab.AI, Switzerland) | [DEL05](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/Deliverables/DEL05.docx) |
| 5.6 | Data sharing practices | [Ferath Kherif](mailto:Ferath.Kherif@chuv.ch) (CHUV, Switzerland), [Banusri Velpandian](mailto:banusrir@gmail.com) (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](mailto:xinming@aisingapore.org) and [Stefan Winkler](mailto:stefan@aisingapore.org) (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](mailto:markus.wenzel@hhi.fraunhofer.de) (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](mailto:wus@who.int) (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](mailto:abbooda@rki.de) (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](mailto:luis.oala@hhi.fraunhofer.de) (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](mailto:naomi.lee@lancet.com) (Lancet, UK), [Eva Weicken](mailto:eva.weicken@hhi.fraunhofer.de) (Fraunhofer HHI, Germany), [Shubhanan Upadhyay](mailto:shubs.upadhyay@ada.com) (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](mailto:luis.oala@hhi.fraunhofer.de) (Fraunhofer HHI, Germany), [Steffen Vogler](mailto:steffen.vogler@bayer.com) (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](mailto:pujaris@who.int) (WHO) and Robyn Whittaker (New Zealand) | – |
| 9 | AI4H applications and platforms | [Manjeet Chalga](mailto:chalgams.hq@icmr.gov.in) (ICMR, India), [Aveek De](mailto:aveek@cms-india.org) (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](mailto:mamun@cse.uiu.ac.bd) (UIU, Bangladesh), [Manjeet Chalga](mailto:chalgams.hq@icmr.gov.in) (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](mailto:mamun@cse.uiu.ac.bd) (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](mailto:eva.weicken@hhi.fraunhofer.de) (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](mailto:brm5@caa.columbia.edu) (Watif Health, South Africa) | [G-006](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-006.docx) (general) |
| 10.1  A | Cardiovascular disease management (TG-Cardio), Subtopic: Cardiovascular disease (CVD) *risk prediction* *using AI* | [Benjamin Muthambi](mailto:brm5@caa.columbia.edu) (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](mailto:whuangcn@qq.com) (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](mailto:nada.malou@paris.msf.org) (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](mailto:ines.sousa@fraunhofer.pt) (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](mailto:frederick.klauschen@charite.de) (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](mailto:g.nakasi.rose@gmail.com) (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](mailto:rdharmaraju@gmail.com) (Wadhwani AI, India) and [Alexandre Chiavegatto Filho](mailto:alexdiasporto@usp.br) (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](mailto:ml@mllab.ai) (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](mailto:arunshroff@gmail.com) (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](mailto:abbooda@rki.de) (Robert Koch Institute, Germany) and [Stéphane Ghozzi](mailto:stephane.ghozzi@helmholtz-hzi.de) (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](mailto:n.langer@psychologie.uzh.ch) (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](mailto:darlington@gudra-studio.com) (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](mailto:Rafael.RuizDeCastaneda@unige.ch) (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](mailto:henry.hoffmann@ada.com) (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](mailto:singhmanjula.hq@icmr.gov.in) (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](mailto:ckuan@infervision.com) (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](mailto:falk.schwendicke@charite.de) and [Joachim Krois](mailto:Joachim.krois@charite.de) (Charité Berlin, Germany); [Tarry Singh](mailto:tarry.singh@deepkapha.ai) (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](mailto:fverzefe@gmail.com) (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](mailto:avaldivieso@anastasia.ai) (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](mailto:edwinjrwu@tencent.com) (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](mailto:yura@eql.ai) (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](mailto:xushan@caict.ac.cn) (CAICT, China), [Ana Riviere-Cinnamond](mailto:rivierea@paho.org) (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) |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_