



# 14<sup>th</sup> Meeting of the Hydrographic Services and Standards Committee

## Report of IEC activities affecting HSSC

### Agenda Item 7.4

HSSC-15, Helsinki, Finland, 5 – 9 June 2023



1. IMO process around ECDIS
2. Introduction of S-100 into **IEC 61174 ECDIS** standard
3. Next political meeting the **Plenary of IEC TC80**



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# IMO PROCESS AROUND ECDIS

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1. **IMO MSC-106**, Nov 2022 agreed revised ECDIS Performance Standards **MSC.530(106)**. This include both S-57 ENC charts and S-100 based standards
2. IEC has noted that Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and EC have submitted a **proposal paper** to **IMO NCSR-10**, May 2023 to amend the recently published MSC.530(106)
3. The proposal was to **amend the IMO ECDIS** Performance Standard **MSC.530(106)** to **include implementation of the IEC 63173-1** as a standardized format to exchange route plans and to **include implementation of the IEC 63173-2** SECOM as a standardized digital exchange method between ship and shore-based maritime service providers
4. **IMO NCSR-10**, May 2023 included both S-421/IEC 63173-1 and SECOM/IEC 63173-2 into to the draft revised IMO MSC.530(106)
  - IMO approval is planned by **IMO MSC-108**, Jun 2024
  - In-force dates are drafted as same as for S-100/S-57 Dual-fuel ECDIS, Legal from 1<sup>st</sup> Jan 2024 and mandatory for new installations from 1<sup>st</sup> Jan 2029



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# INTRODUCTION OF S-100 INTO IEC 61174 ECDIS STANDARD – (1)

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1. Role of the IEC TC80 in the IMO rule ecosystem is to provide technical testing standard for compliance with IMO Performance Standards related to navigation and radio communication
  - **IMO** sets rules based on functionality available to operator
  - The related **IEC** standard describes the minimum technical facilities to implement the specified functionality
  - For same parts, IEC describes the technical solution
    - For example, IMO required that the backup arrangement automatically continue route monitoring in case that primary ECDIS is no more available. IEC specified the format of the Route Plan and technical method to transfer it between ECDIS and its backup arrangement
  - For some other parts, IEC just references to rules set by intergovernmental organizations
    - For example, testing of IHO S-57 ENC charts relies 100% on the content of the IHO S-64 Test data sets and instructions for ECDIS
    - **Critical path:** S-100 related IHO standards including both product specifications (S-100, S-101, etc.) and especially the testing specifications (S-164) should be published as final versions before the assumed completion of the Committee Draft for Vote (CDV)



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# INTRODUCTION OF S-100 INTO IEC 61174 ECDIS STANDARD – (2)

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## 2. IEC plan for drafting of the **next edition 5<sup>th</sup> of IEC 61174 ECDIS**

- Group for this work is **IEC TC80/MT7**, Convenor is Hannu Peiponen (Finland)
- Drafting started the after MSC-106, Nov 2022 approval of revised ECDIS Performance Standards **IMO MCS.530(106)**
- First draft, Jan 2023 was by the convenor of MT7 as input paper for the first meeting of the MT7, Mar 2023
- Meeting schedule planned for IEC TC80/MT7
  - 10<sup>th</sup> – 13<sup>th</sup> July 2023, BSH, Hamburg, Germany
  - 1<sup>st</sup> – 3<sup>rd</sup> Nov 2023, BSI, London, UK
  - 5<sup>th</sup> – 7<sup>th</sup> Dec 2023, BSH, Hamburg, Germany
  - Year 2024, TBD
- IHO is a liaison member of IEC TC80
  - IHO can participate and send their representative to IEC TC80/MT7 meetings



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# INTRODUCTION OF S-100 INTO IEC 61174 ECDIS STANDARD – (3)

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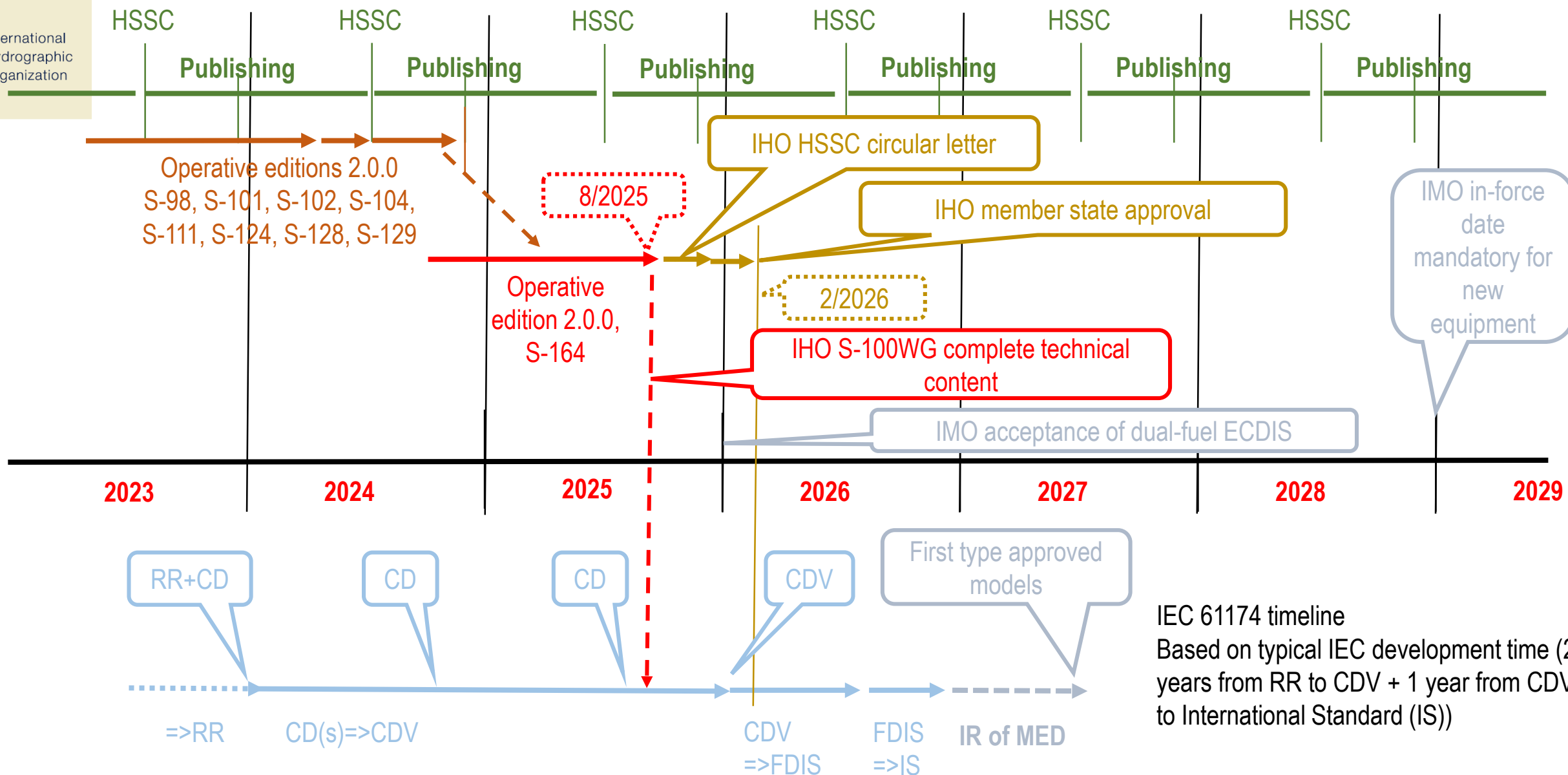
3. IEC TC80/MT7 meeting Mar 2023 drafted two extreme cases for the **timeline**
  - IEC has strict restrictions for the time from official start (Review Report, RR) to publishing. Max 2 years from official start to Committee Draft for Voting (CDV).
  - It was agreed to postpone official start of RR until Dec 2023/Jan 2024 to allow maximum flexibility compared to readiness of IHO in their publishing of the so-called “operational editions” (ed 2.0.0)
  - Next two slides provide max and min timeline
  - **NOTE:** Obviously the planned Dec 2023 meeting of IEC TC80/MT7 will review the progress by IHO in order to see if it is feasible to request official start (RR) or if the official start should be postponed to allow IHO to complete S-100 related standards later than assumed in the max timeline by IEC TC80/MT7



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# IEC 61174 ED5, MAX TIMELINE

International Hydrographic Organization



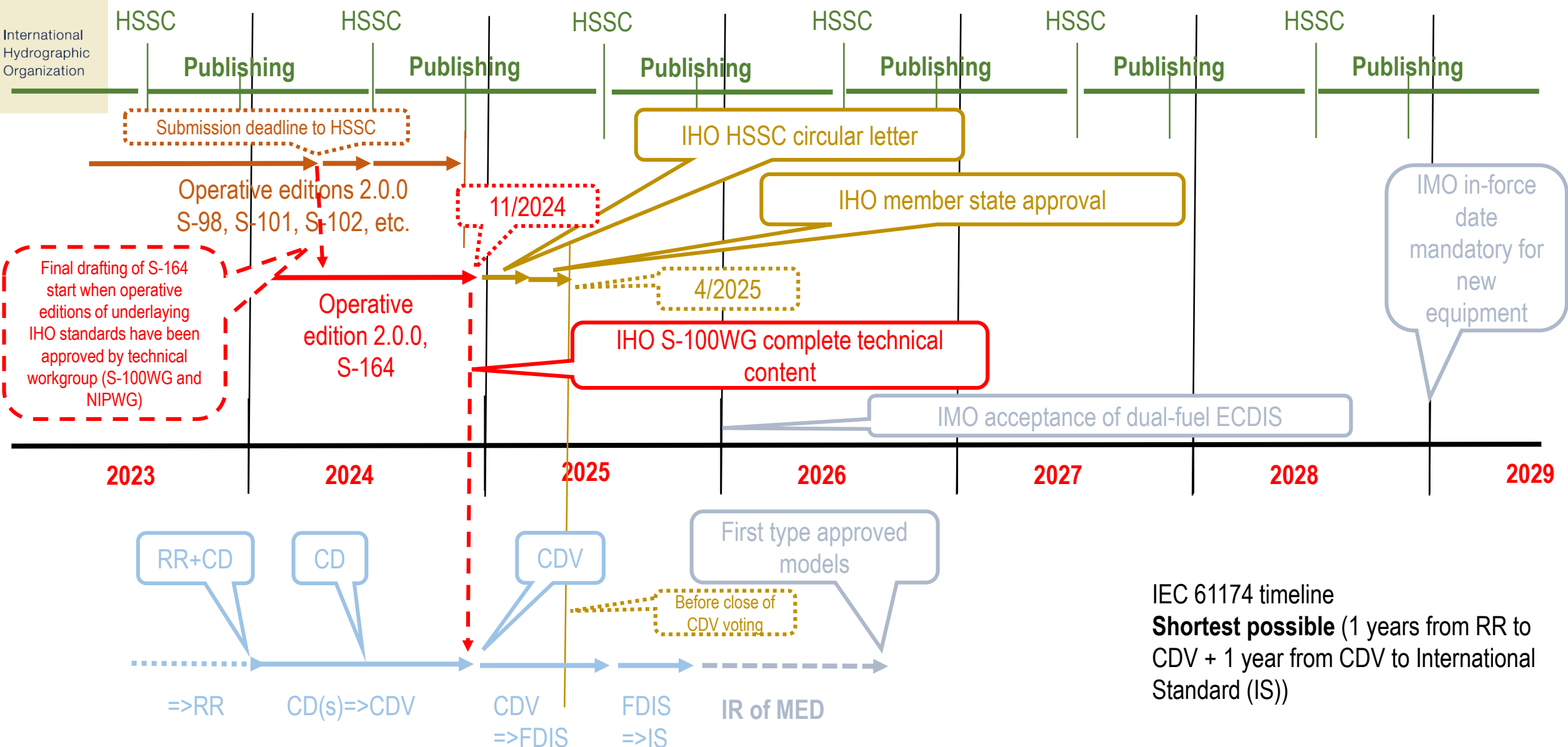
IEC 61174 timeline  
 Based on typical IEC development time (2 years from RR to CDV + 1 year from CDV to International Standard (IS))



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# IEC 61174 ED5, MIN TIMELINE

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IEC 61174 timeline  
**Shortest possible** (1 years from RR to CDV + 1 year from CDV to International Standard (IS))





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# **IEC TC80 PLENARY**

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In IEC, plenary is the highest political decision making body in a Technical Committee (TC)

- IEC TC80 practice is to have plenary in every 2 years
- Next plenary is scheduled  
**19<sup>th</sup> – 20<sup>th</sup> Sep 2023, London**



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# **ACTION REQUESTED OF HSSC**

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The HSSC is invited to:

- Note the information provided