



13th Meeting of the WENDWG

Report of the Hydrographic Commission on Antarctica (HCA)

Agenda Item 05.1Ae

WENDWG13, Aalborg, Denmark – 21 – 23 February 2023



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HYDROGRAPHIC COMMISSION ON ANTARCTICA

International
Hydrographic
Organization

Members

Argentina, Australia, Brazil, Chile, China, Colombia, Ecuador, France, Germany, Greece, India, Italy, Japan, Korea (Rep. of), New Zealand, Norway, Peru, Russian Federation, South Africa, Spain, Uruguay, United Kingdom, USA & Venezuela.

Observers

Antarctic Treaty Secretariat ([ATS](#)), Council of Managers of National Antarctic Programmes ([COMNAP](#)), International Association of Antarctic Tour Operators ([IAATO](#)), Scientific Committee on Antarctic Research ([SCAR](#)), International Maritime Organization ([IMO](#)), Intergovernmental Oceanographic Commission ([IOC](#)), General Bathymetric Chart of the Oceans ([GEBCO](#)), International Bathymetric Chart of the Southern Ocean ([IBCSO](#)).

Last Conference

18th HCA, May 2022, Germany

Next Conference

19th HCA, March 2024, Italy

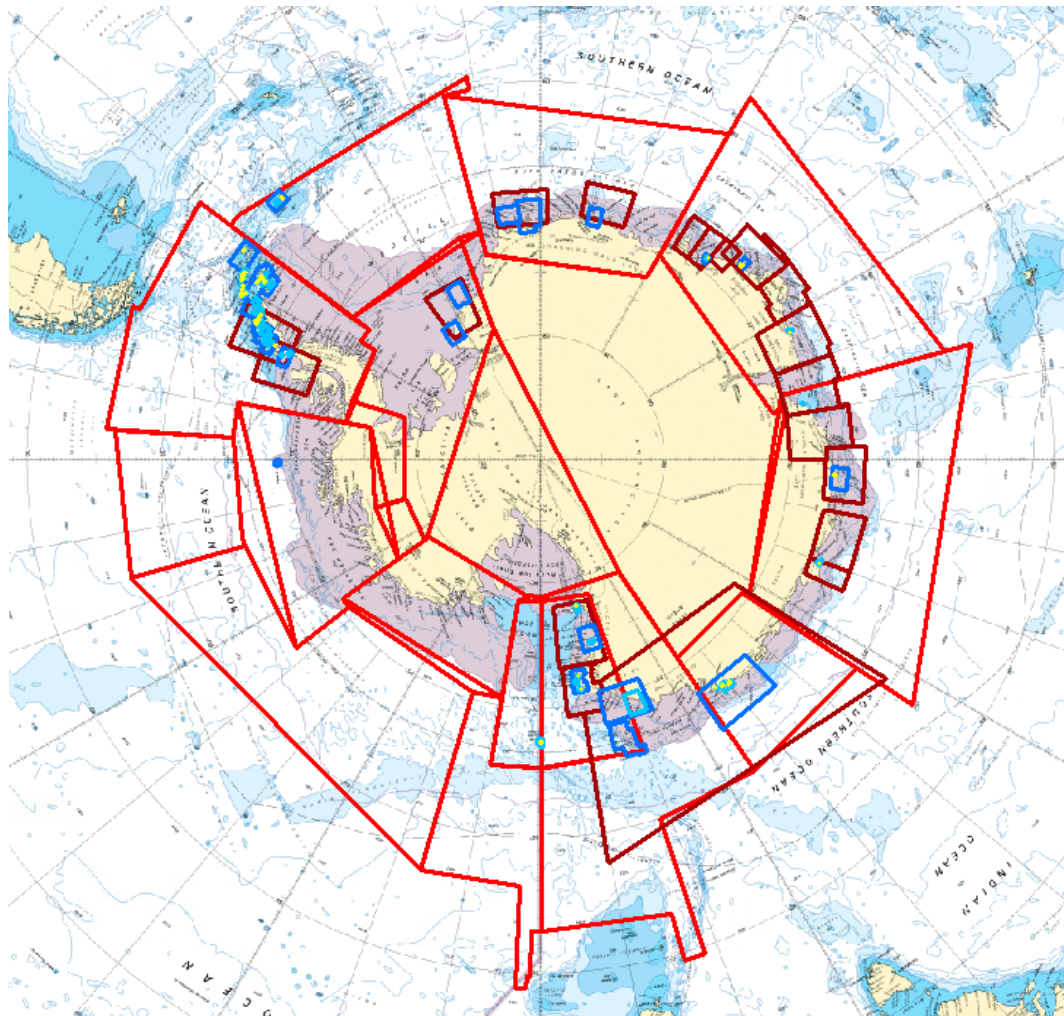
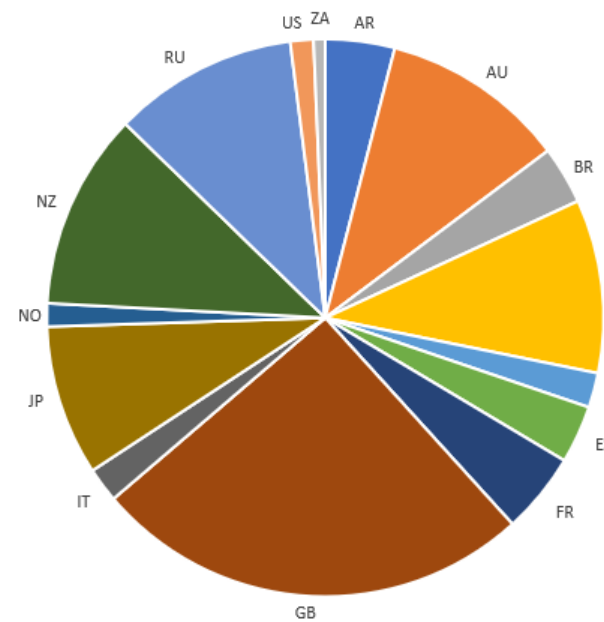


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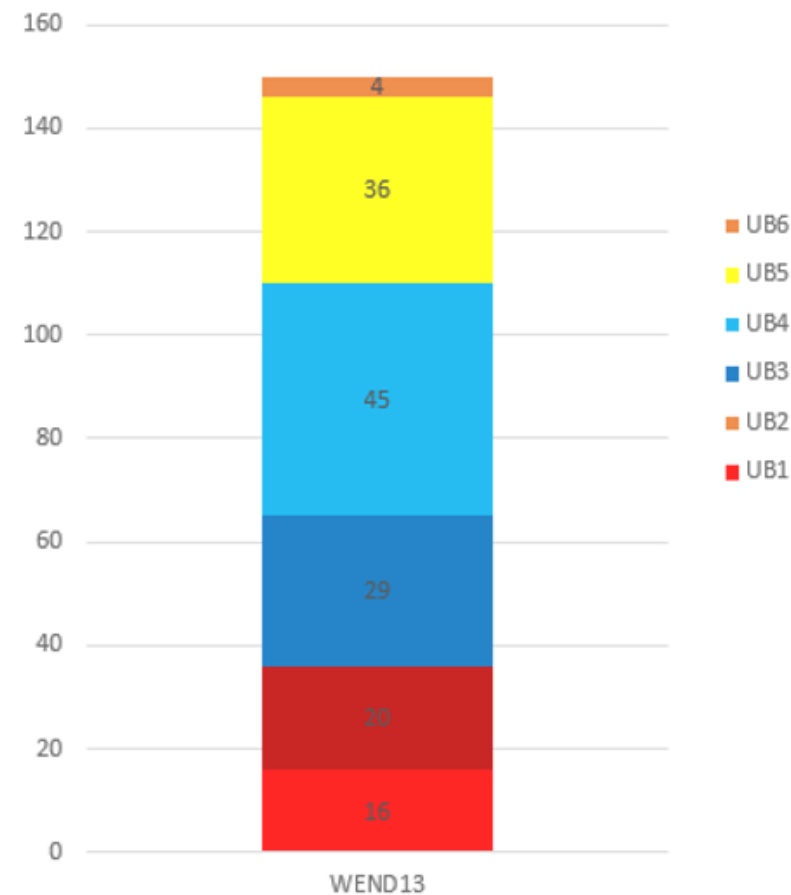
REGION M: STATUS OF ENC COVERAGE

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Region M Producers



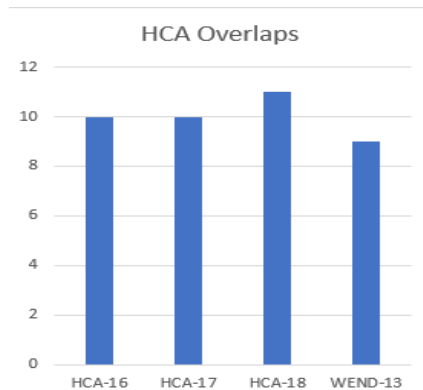
150 Region M ENCs





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REGON M OVERLAP REPORT



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HCA MS continue to work together to resolve overlap issues

ID	RENC Membership	RHC	ENC 1	ENC 2	Area	Usage Band	ENC 1 Scale	ENC 2 Scale	Overlap extent (Kmxkm) (m/square NM)	Impact Assessment	Justification	ICCWG Coordinator Comments
625	IC-ENC	HCA	CL4MA956	GB403207	Gerlache Strait Wilhelmina Bay	4	45000	22000	15Km x 7.5Km, 4Km x 4Km	LOW	Area of little SOLAS traffic, covered by UNSARE on both cells. Minor differences between content.	Accepted since HCA 16 GB clipped for overlapping data in channel. Adjusted comp scale in area of charted data to give preference over unsurveyed area
626	IC-ENC	HCA	CL4MA957	GB403207	Gerlache Strait Wilhelmina Bay	4	45000	22000	17Km x 7.5Km	LOW	Overlap only covers LNDARE and UNSARE, with very little SOLAS traffic expected within the area.	Accepted since HCA 16 by amendment to comp scale to resolve overlap item 626
749	IC-ENC	HCA	GB203572	RU2A1AD0	Marguerite Bay Laubeuf Fjord	2	250000	700000	169Km X 243Km	LOW		Accepted since HCA 17 GB cell with later dates takes priority due to comp scale
930	IC-ENC - PRIMAR	HCA	NZ11490E	FR275910	Ross Sea	1	1500000	1500000	457Km x 688Km	LOW		New at HCA 18 Based on same scale overlapping INT charts FR NZ to resolve based on underlying data
127	IC-ENC	SWPHC HCA	RU1B0PF0	AU160090	Southern Ocean	1	3000000	3500000	560Km x 1700Km 273008 sq. NM	LOW	Overlap is located in the Antarctica, it charts very deep waters. Little traffic as expected.	Reported at HCA 16 - unlikely to be resolved
128	IC-ENC	SWPHC HCA	RU1B0PF0	AU160120	Southern Ocean	1	3000000	3500000	560Km x 195Km 31605 sq. NM	LOW	Overlap is located in the Antarctica, it charts very deep waters. Little traffic as expected.	Reported at HCA 16 - unlikely to be resolved
30	IC-ENC - NON RENC	HCA	RU2BNM40	JP20ODD0	Southern Ocean	2	700000	700000	111Km x113 Km	UNABLE	IC-ENC does not have access NON RENC ENC to conduct assessment	Reported at HCA 16 - unlikely to be resolved
415	IC-ENC	HCA	CL4MA960	GB400445	Lemaire Channel	4	45000	22000	5.1KM x 12.6KM	MEDIUM	General depiction of bathymetry similar between cells, CL cell has a higher area of UNSARE then on the GB cell and UWTR0Cs not shown.	New at HCA 18 CL4MA960 represents INT9104 GB400445 represents INT9118 Further investigation into sources in overlap required by CL & UK
414	IC-ENC	HCA	CL5MA980	GB57211A	Port Lockroy	5	22000	12000	3.7KM X 5.4KM	MEDIUM		New at HCA 18 CL ENC is not equivalent to INT chart Different comp scales UK in discussion with CL.



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REGION M S10X READINESS QUESTIONNAIRE

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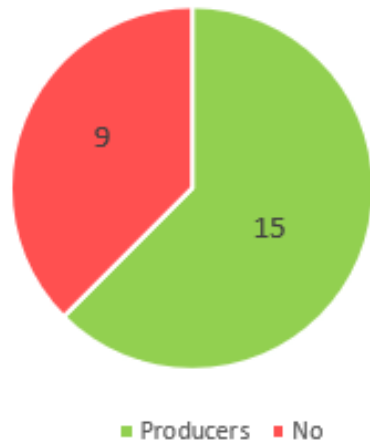
24 Member States were asked to complete a short questionnaire on S10X implementation for region M

12 Responses received from 15 of the existing region M producer nations

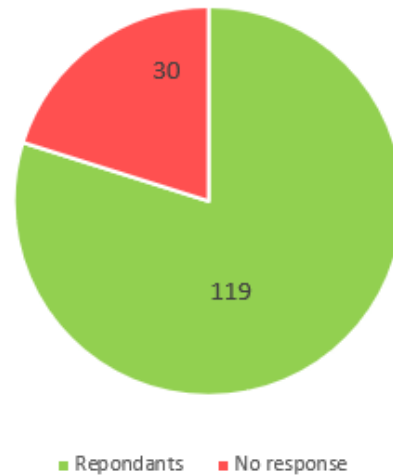
Majority of MS intend to produce S10x services in region M in parallel with other RHCs they are members of

All respondents are focusing on the delivery of IHO priority S10x services

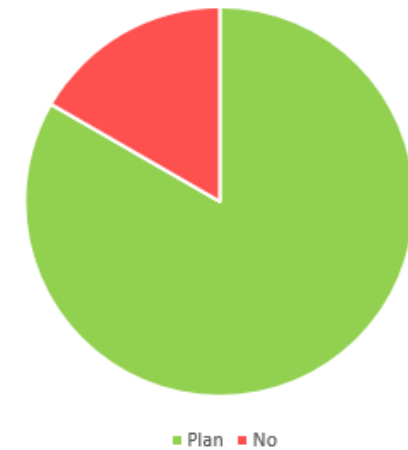
HCA MS Producing ENCS



MS Questionnaire responses as a proportion of HCA ENCS



MS with a S10X Implementation Plan

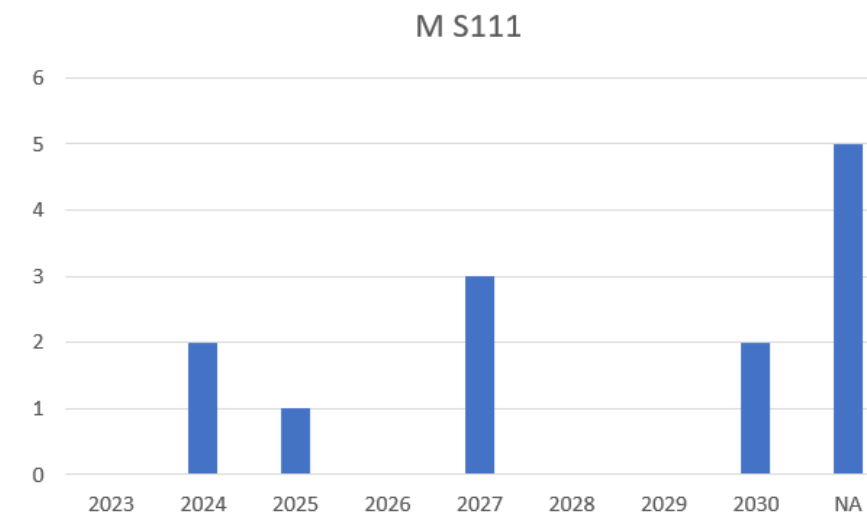
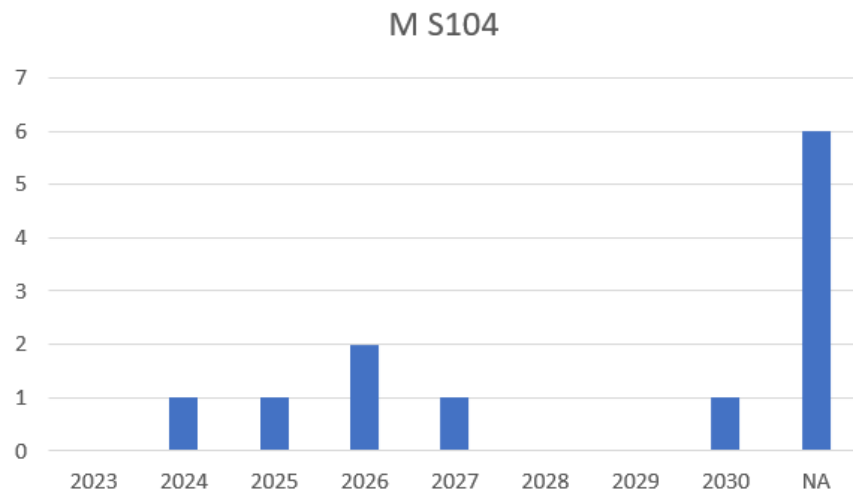
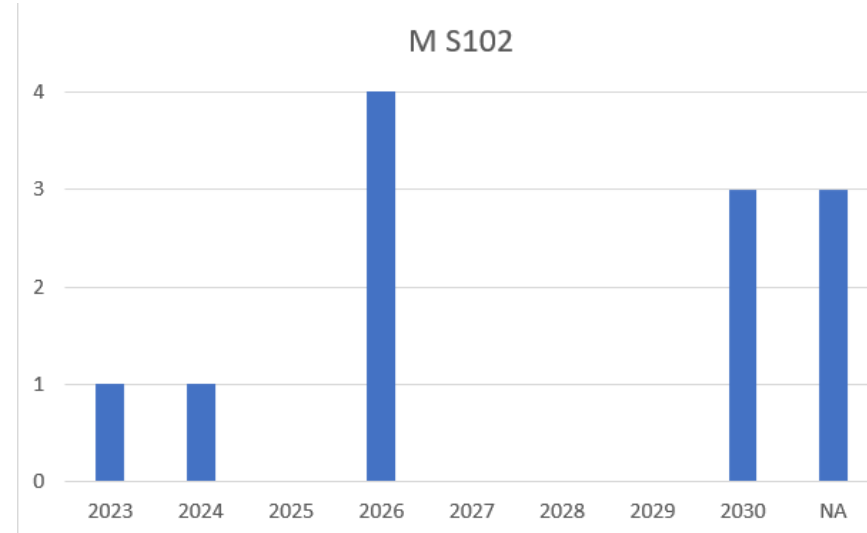
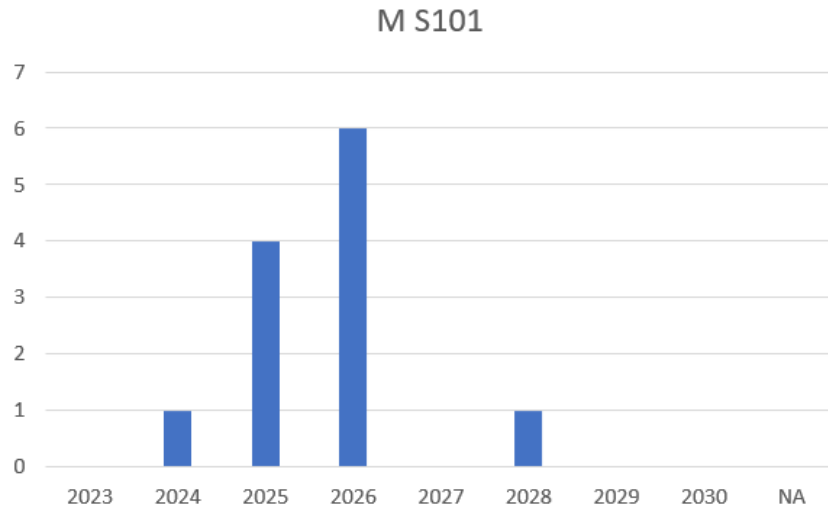




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REGION M S10X IMPLEMENTATION DATES

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S10X DELIVERY CHALLENGES

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REGION M S10X COORDINATION

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Following up on Action WENDWG12/33 (IGIF pathway matrix per S-1xx product, per RHC), HCA agreed on some guiding initial principles and leaders to fill the HCA S-100- IGIF Matrix:

- **S-101: GB** (as Region M Charting Coordinator, continuity by S-57 conversion)
- **S-102: GE** (in liaison with AWI, as Seabed 2030 Data Centre/IBCSO)
- **S-104: US** (in its global capacity in ocean modelling)
- **S-111: US/FR** (in its global capacity in ocean modelling)
- **S-122: EC/GE** (making benefits of experience gained in Ecuador and BSHC)
- **S-124: AR, AU, CL, ZA, NZ** (as NAV Coordinators)
- **S-128: NO/GB** (as Operators of PRIMAR/IC-ENC)
- **S-411** – Ice information: AR/CL/GE



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REGION M S100 IGIF MATRIX

4 Member States provided an IGIF matrix (16% of MS or 26% of Region M producers)

Output is not reflective of region due to, low response, averaging and wide range of readiness

1 MS with NAVAREA coordination provided a matrix readiness score

S-101 (ENC)			S-102 (Bathy Surface)			S-104 (Water Levels)		
Readiness Level	Mean	Mode	Readiness Level	Mean	Mode	Readiness Level	Mean	Mode
Governance and Institutions (A)	11.10	11.10	Governance and Institutions (A)	9.08	8.40	Governance and Institutions (A)	9.75	8.40
Policy and Legal (A)	10.43	11.10	Policy and Legal (B)	7.05	8.40	Policy and Legal (B)	7.05	8.40
Data (B)	6.38	5.70	Data (B)	5.70	8.40	Data (C)	5.03	3.00
Financial (B)	7.65	11.10	Financial (B)	7.05	8.40	Financial (C)	3.60	3.00
Innovation (D)	2.93	3.00	Innovation (C)	4.35	5.70	Innovation (C)	4.35	5.70
Standards (C)	5.63	5.70	Standards (B)	5.70	5.70	Standards (B)	5.70	5.70
Partnerships (C)	4.95	#N/A	Partnerships (C)	4.35	5.70	Partnerships (C)	3.68	3.00
Capacity and Education (C)	3.60	5.70	Capacity and Education (C)	4.35	3.00	Capacity and Education (C)	4.35	3.00
Communication and Engagement (C)	3.60	3.00	Communication and Engagement (B)	5.70	8.40	Communication and Engagement (B)	6.38	3.00
Total:	56.25	#N/A	Total:	53.33		Total:	49.88	43.20

S-111 (Surface Currents)			S-122 (Marine Protected Areas)			S-128 (Catalog of Products)		
Readiness Level	Mean	Mode	Readiness Level	Mean	Mode	Readiness Level	Mean	Mode
Governance and Institutions (A)	9.75	8.40	Governance and Institutions (A)	9.08	11.10	Governance and Institutions (A)	8.40	11.10
Policy and Legal (B)	6.30	8.40	Policy and Legal (B)	7.73	8.40	Policy and Legal (B)	7.05	#N/A
Data (D)	2.93	3.00	Data (B)	5.70	5.70	Data (B)	6.38	5.70
Financial (C)	3.60	3.00	Financial (D)	2.85	0.00	Financial (D)	2.18	0.00
Innovation (D)	2.93	3.00	Innovation (C)	5.03	3.00	Innovation (C)	4.28	3.00
Standards (B)	5.70	5.70	Standards (B)	7.73	5.70	Standards (C)	4.95	5.70
Partnerships (C)	3.68	3.00	Partnerships (B)	5.70	5.70	Partnerships (C)	3.60	5.70
Capacity and Education (C)	5.03	5.70	Capacity and Education (C)	5.03	3.00	Capacity and Education (D)	2.93	3.00
Communication and Engagement (B)	6.38	3.00	Communication and Engagement (C)	5.03	3.00	Communication and Engagement (C)	4.28	#N/A
Total:	46.28	43.20	Total:	53.85	45.60	Total:	44.03	#N/A



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ACTIONS TO BE CONSIDERED BY THE WENDWG

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WENDWG invited to note the report from HCA

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