GYSEOY 2024/25 Master Schedule: Deliverables, Training, Questions-and-Answer sessions, Mentoring, and the formal Requirement Review and the formal Concept Design Review

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
	1 Cape	Get to Know You Meeting (Cape)				Scenario, Evaluation, Training, GENESYS™, Q & A, Master Schedule, mentorship, general	15 April 2024
" Problem space"	2 Cape	Definition of root problem List of all stakeholders	—	Text (pdf file)	13 May 2024	*System engineering:* Requirements: Stakeholder requirements versus system requirements, requirements for a requirement, traceability, validation and verification. Functional requirements and performance requirements. System life cycle: Stages, gates, baselines and life cycle processes. System principles: Hierarchy and emergence. Symptoms versus the root problem. Context diagram. Interface management.	15 and 16 April 2024. [All training will occur face-to-face.]
	3 Cape	Definition of key performance indicators (measures of effectiveness)	—	Text (pdf file)			
	4 Cape	Specification of as-is and to-be values of the key performance indicators (measures of effectiveness), including the rationale for each key performance indicator	—	Text (pdf file)			
	5 Cape	Validation or verification requirement for each key performance indicator (measure of effectiveness)	—	Table with traceability of verification requirements (pdf file)			
	6 Cape	Context diagram with external co-functioning systems and the specification of all external interfaces.	—	Context diagram, specification of all external interfaces			

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
" Problem space"	7 Cape	Validation or verification requirement for each key performance indicator (measure of effectiveness)	Table maker script to create document	Table output of verification requirements showing traceability (pdf file)	10 June 2024	*GENESYS™*: Capture source requirements, preliminary requirements breakdown and analysis. Identify requirement types (constraint, functional, performance). Verification requirements (method, level, description, verifying requirements and functions). Generate basic outputs of information from the model (table maker, system description document). Building components in GENESYS™. Connecting components via interfaces.	TBD [Most training will occur on the INCOSE EMEA Zoom account at dates to be scheduled with either all teams jointly, or each team separately, preferably outside working hours.]
	8 Cape	Context diagram with external co-functioning systems and the specification of all external interfaces.	Interface block diagram, and Interface details	System description document with appropriate sections selected (pdf file)			
	1 Pretoria	Get to Know You Meeting (Pretoria)				Scenario, Evaluation, Training, GENESYS™, Q & A, Master Schedule, mentorship, general	22 April 2024
	2 Pretoria	Definition of root problem List of all stakeholders	—	Text (pdf file)	20 May 2024	*System engineering:* Requirements: Stakeholder requirements versus system requirements, requirements for a requirement.	22 and 23 April 2024 [face-to-face]
	3 Pretoria	Definition of key performance indicators (measures of effectiveness)	—	Text (pdf file)			

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
“ Problem Space”	4 Pretoria	Specification of as-is and to-be values of the key performance indicators (measures of effectiveness), including the rationale for each key performance indicator	—	Text (pdf file)	20 May 2024	*System engineering:* Requirements: Traceability, validation and verification. Functional requirements and performance requirements. System life cycle: Stages, gates, baselines and life cycle processes. System principles: Hierarchy and emergence. Symptoms versus the root problem. Context diagram. Interface management.	22 and 23 April 2024 [face-to-face]
	5 Pretoria	Validation or verification requirement for each key performance indicator (measure of effectiveness)	—	Table with traceability of verification requirements (pdf file)			
	6 Pretoria	Context diagram with external co-functioning systems and the specification of all external interfaces.	—	Context diagram, specification of all external interfaces			
	7 Pretoria	Validation or verification requirement for each key performance indicator (measure of effectiveness)	Table maker script to create document	Table output of verification requirements showing traceability (pdf file)	10 June 2024	*GENESYS™:* Capture source requirements, preliminary requirements breakdown and analysis. Identify requirement types (constraint, functional, performance). Verification requirements (method, level, description, verifying requirements and functions).	TBD [Most training will occur on the INCOSE EMEA Zoom account at dates to be scheduled.]

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
" Problem Space"	8 Pretoria	Context diagram with external co-functioning systems and the specification of all external interfaces.	Interface block diagram, and Interface details	System description document with appropriate sections selected (pdf file)	10 June 2024	Generate basic outputs of information from the model (table maker, system description document). Building components in GENESYS™. Connecting components via interfaces.	[Preferably outside working hours.]
	9 Cape					One-day mentorship training session	2 May 2024
	9 Pretoria					One-day mentorship training session	3 May2024
	10					Question-and-Answer sessions	10 May 2024 31 May 2024
	11	Report from each external mentor					10 June 2024
	12	Formal Stakeholder Requirement Review by the Evaluation Panel based on the deliverables due on 13or 20 May and 10 June 2024, as well as an oral presentation					13 and 14 June 2024

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
“ Problem space”	13	Validation or verification requirement for each external interface.	—	Table output of verification requirements showing traceability (pdf file) System description document (pdf file)	29 July 2024	*System Engineering*: Concept exploration. Use cases and use case diagrams. Cost-effectiveness decision-making models. Activity diagrams and functional flow block diagrams. *GENESYS™*: Creating use cases in GENESYS™. Creating activity diagrams in GENESYS™. Linking the activity diagrams to the use cases (creating behavioural threads)	SE training will be part of the Q and A sessions scheduled for 28 June and 19 July
“ Solution space”	14	Definition of relevant solution concepts, including the operations concept, logistic support concept, personnel concept, et cetera	—	Text (pdf file)			TBD
“ Problem space”	15	Use case diagram showing all relevant use cases.	System description document with concise description of each use case.	System description document (pdf file). Concise description of each use case.			
	16	Specification of performance requirements for each use case, including the rationale for each.	—				

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
" Problem space"	17	Validation or verification requirements for each use case and for its performance requirements.	—		29 July 2024		
	18					Question-and-Answer sessions	28 June 2024 19 July 2024
	19	Report from each external mentor					29 July 2024
" Solution space"	20	Informal oral feedback by Evaluation Panel of deliverables from 29 July 2024					1 and 2 August 2024
	21	Activity diagram for each use case. [The functional architecture consists of all use cases jointly with all their activity diagrams]	Either the complete model from GENESYS™, or a manually created text document showing activity diagrams	GENESYS™ model export (*.gnux file)	16 September 2024	*System engineering*: Context diagram versus schematic block diagram. Functional analysis, allocation, implementation and synthesis. *GENESYS™*: Integrating behavioural threads from use cases and activity diagrams. Segmenting behaviour to the system and its context on layer 1 of architecture (not down to next-lower assembly)	SE training will be part of the Q and A sessions
	22	Specification of the performance requirements for each activity (function) in each activity diagram, including the rationale for each.	—				TBD

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
“ Solution space”	23	Verification requirements for each internal interface.	—		16 September 2024		
	24	Validation or verification requirements for the performance requirements of each activity in each activity diagram.	—				
	25					Question-and-Answer sessions	23 Aug 2024 6 Sept 2024
	26	Report from each external mentor					16 September 2024
	27	Informal oral feedback by Evaluation Panel of deliverables from 16 September 2024					19 and 20 September 2024
	28	Allocation of each function and its performance requirements to a system element	Functions allocated to components		4 November 2024	*GENESYS™:* Allocate functional architecture onto a physical architecture. Move between layer 1 and layer 2 in architecture. Keep the functional and physical architecture in sync. Create layer 2 interfaces and functional item flows. Create layer 1 and layer 2 physical links that comprise the identified interfaces (physical instantiation of interfaces). Link transfer identified items from the behaviour.	SE training will be part of the Q and A sessions scheduled for 11 and 25 October 2024
	29	Schematic block diagram showing all system elements and all external and internal interfaces. [This is the physical architecture]	Physical block diagram showing components and physical links				
	30	Specify each internal interface.	—				TBD

	Sequence number	*System engineering speak*	*GENESYS™ speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
“ Solution space”	31					Question-and-Answer sessions	11 October 2024 25 October 2024
	32	Report from each external mentor					4 November 2024
	33	Informal oral feedback by Evaluation Panel of deliver-ables from 4 November 2024					7 and 8 November 2024
	34	System specification (or at least the substantive core of a system specification) [Note: The system description document from GENESYS™ contains much information to populate a system specification, but does not follow any particular list of contents]	System description document from GENESYS™. Complete model exported from GENESYS™	System description document (pdf file). GENESYS™ model export (*.gnux file)	20 January 2025		
	35	An individual GYSEOY 2024 diary for each team member where she/he records: Date, topic discussed, duration, location	—	Spreadsheet (pdf file)	Hand in whatever version is available at each of the hand-in dates specified above		

	Sequence number	*System engineering-speak*	*GENESYS™-speak*	*Format*	*Deliverable hand-in*	*Training requirements*	*Event date*
" Solution space"	36	Create htm of the Genesys™ database. Access the reports menu. Select "Teamview". Save output in a folder named "Teamview".					
	37					Question-and-Answer sessions	22 November 2024 10 January 2025
	38	Report from each external mentor					20 January 2025
	39	Formal System Design Review by the Evaluation Panel based on the system description document from GENESYS™, as well as an oral presentation	—				23 and 24 January 2025

C o m m e n t s

1 System engineering is an iterative process. Formal deliverables will be required by the stated dates, and formal or informal feedback will be given. However each team can subsequently change their deliverable, based on the feedback, or further insight obtained during the GYSEOY process. Document version control will need to be strictly performed.

2 The evaluation panel will evaluate the interim deliverables only on the basis of documents. The same general oral feedback will be provided to all teams, to prevent any possibility that one team is provided specific unintended feedback that provides an unfair advantage over other teams.

3 A GYSEOY drop box account will be opened with general folder for general use by all, and a separate private folder for each GYSEOY team.

4 All training on the principles of system engineering will occur face-to-face as scheduled. Additional training sessions will occur during the Question-and-Answer sessions.

5 All Genesys^{TM} training will be scheduled TBD, with some face-to-face and some on the INCOSE EMEA Zoom account. Sessions will be scheduled with either both teams jointly, or each team separately, preferably outside working hours.