PROJECT: FAQAS	PHASE: -	WP: WP1
WP Title: Analysis and survey of mutation testing **Company:** SnT **WP Manager:** Fabrizio Pastore **Start Event:** KO **Planned Date:** T0 **End Event:** TM1 **Planned Date:** T0+5M		**Sheet** 1 **of** 6 **Issue Ref** 1 **Issue Date** 2019.07.23
Inputs: - SoW **Tasks:** - WP1.1: Analysis and survey of mutation testing approaches [R1-1] with documented outcomes [R1-2]. *Leader: SnT. Participants: None.* **Outputs:** - D1: Analysis and survey of mutation testing		

PROJECT: FAQAS	PHASE: -	WP: WP2
WP Title: Study of mutation testing applicability to space software **Company:** SnT **WP Manager:** Fabrizio Pastore **Start Event:** TM1 **Planned Date:** T0+5M **End Event:** TM2 **Planned Date:** T0+10M		**Sheet** 2 **of** 6 **Issue Ref** 1 **IssueDate** 2019.07.23
Inputs: - D1 **Tasks:** - WP2.1: Process and case studies. - WP2.1.1: Prototype the mutation testing process [R2-1.a-f]. *Leader: SnT. Participants: None.* - WP2.1.2: Identify the case studies (opensource case studies) [R2-2.a] [R2-2.b] [R2-2.c] [R2-2.d] [R2-2.f]. Leader: SnT. Participants: GSL, LXS.		

- WP2.1.3: Identify the case studies (GSL case studies) [R2-2.a] [R2-2.b] [R2-2.c] [R2-2.d] [R2-2.f]. Leader: GSL. Participants: SnT.
- WP2.1.4: Identify the case studies (LXS case studies) [R2-2.a] [R2-2.b] [R2-2.c] [R2-2.d] [R2-2.f]. Leader: LXS. Participants: SnT.
- WP2.2: Empirical evaluation of selected techniques
- WP2.2.1: Evaluate mutation testing empirically [R2-3.a-e]. *Leader: SnT. Participants: GSL, LXS.*
- WP2.2.2: Define a simplified mutation testing tool chain [R2-2.e] [R2-4]. *Leader: SnT. Participants: None.*

Outputs:

- D2: Study of mutation testing applicability to space software [R2-5]
- SW1: Benchmark including case studies and documentation.

PROJECT: FAQAS	**PHASE:** -	**WP:** WP3
WP Title: Development of the mutation testing framework **Company:** SnT **WP Manager:** Fabrizio Pastore **Start Event:** TM2 **Planned Date:** T0+10M **End Event:** TM3 **Planned Date:** T0+20M		**Sheet** 3 **of** 6 **Issue Ref** 1 **IssueDate** 2019.07.23

Inputs:

- D2
- SW1

Tasks:

- WP3.1: Develop the initial prototype
- WP3.1.1: Develop the mutation testing toolset [R3-1.a]. *Leader: SnT. Participants: None.*
- WP3.1.2: Develop the test case generation toolset [R3-1.b]. *Leader: SnT. Participants: None.*
- WP3.2: Develop the complete prototype
- WP3.2.1: Develop the mutation testing toolset [R3-1.a]. *Leader: SnT. Participants: None.*
- WP3.2.2: Develop the test case generation toolset [R3-1.b]. *Leader: SnT. Participants: None.*
- WP3.3: Validation of the toolset [R3-1.c]. *Leader: SnT. Participants: GSL, LXS.*
- WP3.3.1: Validation of the toolset on GSL case studies [R3-1.c]. *Leader: GSL. Participants: SnT.*
- WP3.3.2: Validation of the toolset on LXS case studies [R3-1.c]. *Leader: LXS. Participants: SnT.*
- WP3.3.3: Validation of the toolset on opensource case studies [R3-1.c]. *Leader: SnT. Participants: None.*

Outputs:

- D3: Toolset documentation to conform with ECSS standards [R3-2] [R3-4].
- SW2: First version of the FAQAS framework released for TR4. Includes mutation testing and test case generation features.
- SW2: The FAQAS framework.
- D4: Validation of the toolset [R3-4].

PROJECT: FAQAS	PHASE: -	WP: WP4
WP Title: Evaluation of the mutation testing process and methodology definition **Company:** SnT **WP Manager:** Fabrizio Pastore **Start Event:** TM3 **Planned Date:** T0+20M **End Event:** TM4 **Planned Date:** T0+24M		**Sheet** 4 **of** 6 **Issue Ref** 1 **IssueDate** 2019.07.23

Inputs:

- D1
- D2
- D3
- D4

Tasks:

- WP4.1: Definition of the mutation testing methodology [R4-2.a] [R4-2.b]. *Leader: SnT. Participants: None.*
- WP4.2: Evaluation of the mutation testing methodology and the FAQAS framework [R4-1]. *Leader: SnT. Participants: GSL,LXS.*
- WP4.2.1: Evaluation of the mutation testing methodology and the FAQAS framework on GSL case studies [R4-1]. *Leader: GSL. Participants: SnT.*
- WP4.2.2: Evaluation of the mutation testing methodology and the FAQAS framework on LXS case studies [R4-1]. *Leader: LXS. Participants: SnT.*
- WP4.2.3: Evaluation of the mutation testing methodology and the FAQAS framework on opensource case studies [R4-1]. *Leader: SnT. Participants: None.*
- WP4.3: Dissemination [R4-2.c] [R4-3] [R4-4]. *Leader: SnT. Participants: GSL, LXS.*

Outputs:

- D5: Evaluation of the mutation testing process and methodology definition [R4-5] [R4-6].
- Generic GSTP work package: TDP, AB, BR, TAS, FP, ESR, FR, CCD, PWP [R4-5] [R4-6].

PROJECT: FAQAS	PHASE: -	WP: WP5
WP Title: Maintenance and improvement of the toolset		**Sheet** 5 **of** 6

Company: SnT		Issue Ref 1
WP Manager: Fabrizio Pastore		
Start Event: TM5	Planned Date: T0+24M	
End Event: TM6	Planned Date: T0+36M	IssueDate 2019.07.23

Inputs:

- SW2

Tasks:

- WP5.1: Maintenance of the FAQAS framework [R5-1] [R5-2]. *Leader: SnT. Participants: None.*
- WP5.2: User training [R5-3]. *Leader: SnT. Participants: None.*

Outputs:

- D6: Maintenance and improvement of the toolset [R5-4]
- Updated SW2: FAQAS framework after maintenance. [R5-5]

PROJECT: FAQAS	PHASE: -	WP: WP6
WP Title: Activity management		Sheet 6 of 6
Company: SnT		
WP Manager: Fabrizio Pastore		Issue Ref 1
Start Event: KO	Planned Date: T0+0M	
End Event: TM6	Planned Date: T0+36M	IssueDate 2019.07.23

Inputs:

- SoW

Tasks:

- WP6.1 Coordination of the activities and Team management.
- WP6.2 Interface to ESA and sub-contractor management.
- WP6.3 Project plan setup and maintenance.
- WP6.4 Supervision and management of Action Items.
- WP6.5 Organization of meetings and teleconferences.
- WP6.6 Documentation management and progress reporting

Outputs: None