

## October, 19<sup>th</sup> 2017. SONATA 3.0 Release

SONATA announces the launch of an upgraded release of its integrated platform, SONATA 3.0, which includes all the software components developed, integrated, tested and qualified within the time frame of the project.

SONATA is offering an NFV framework that provides both a development environment for network service chains and a service platform with a modular orchestrator for service deployment over multiple points of presence.

The project has embraced an agile development philosophy with continuous improvements and this is the fifth official software release delivered since the project started.

*“This major release of the SONATA NFV platform is not the final one as we will continue extending the functionalities. Future updates will be announced on the project website and documented as part of the corresponding GitHub open repositories. Besides, we are aware that a recently started EU-funded project, 5GTANGO, has already adopted the SONATA platform and will contribute to the NFV community under the same agile philosophy; some others, like 5GCity and 5GMedia, are currently exploring our platform and its adoption. This will guarantee the evolution and sustainability of the results”,* says Josep Martrat, Coordinator of the SONATA project and Head of the Telecom Market at Atos Research and Innovation.

*“In this release, we have worked hard to make SONATA more attractive, turning the code base into product-like code that can be picked up easily by other organisations and projects. Our intention was to lower the entry barrier to the usage and development of SONATA as much as possible by simplifying the on-boarding process, creating compelling documentation and tutorial videos, and defining the processes about how to contribute code or how to get additional technical support. Fortunately, this effort has already led to various adoptions of the SONATA system outside the SONATA consortium”,* Peer Hasselmeyer, SONATA Technical Manager and Senior Researcher at NEC Laboratories Europe, said.

The SONATA framework consists of two parts:

**The SONATA Service Platform (SP)** provides a highly modular and customizable management and orchestration (MANO) framework composed of various loosely coupled micro-services/plugins. It offers the functionality to: 1) orchestrate and manage network services during their life-cycle, 2) interact with the underlying virtual infrastructure through Virtual Infrastructure Managers (VIM) and WAN Infrastructure Managers (WIM) to efficiently use heterogeneous sets of virtual resources, 3) store available network services and functions in dedicated catalogues, 4) show the status of the deployed network services and functions, the virtual infrastructure, and the virtual resources through a set of repositories, and 5) interact with the outside world with a single endpoint called the Gatekeeper.

According to José Bonnet, Senior Technology Consultant at Altice Labs, *“in this release, we have concentrated our efforts in making the SONATA Service Platform a carrier-grade solution, capable of*

*providing platform owners an adequate support for the extremely demanding scenarios of the 5G landscape. Besides new and improved features, we have also introduced adequate configuration mechanisms that allow for a smoother adoption of the SONATA Service Platform into an existing infrastructure. We believe that our micro-services based design and implementation puts this platform in the front-line of flexible solutions, where the adoption of any monolithic product will prove to be too costly in engineering services. The ability to securely give back the developer monitoring data in near real time is another feature that is a critical differentiator of our platform in the market.”*

**The SONATA Software Development Kit (SDK)** is a modular set of light-weight software tools which offers mechanisms for the development and validation of virtual network functions and services. It includes an editor for service descriptors, an emulator to locally test developed services, monitoring data analysis tools, service storage, packaging and publishing tools.

According to Wouter Tavernier, Post-Doctoral Researcher at Ghent University, who has led the SONATA SDK developments, *“during this period, the SDK has been extended with new components for service validation and visualization, an integrated graphical user interface for composing NFV services, and new features mainly focusing on extensive security support and increasing the usability and extensibility of the global SDK solution”*.

Although most of the SDK tools focus on the SONATA Service/MANO Platform, many tools are also prepared to interoperate beyond the scope of SONATA boundaries. The SDK emulator, for example, has been extended to support Open Source MANO (OSM). Other tools, such as the packaging component, are prepared to be extended to other platforms beyond the initial scope of SONATA.

*“The emulator, unique in the NFV landscape, is now not only capable of supporting SONATA's own Service Platform, but also the MANO solution provided by the OSM, project with which SONATA is actively collaborating and to which we expect to contribute with some of SONATA components”*, said Diego Lopez, Senior Technology Expert at Telefonica, Chair of ETSI NFV ISG and Co-chair of IRTF's NFVRG.

SONATA also supports interoperability with Operation Support and SLA management systems, facilitating the integration with other external systems (i.e Billing).

SONATA's automated installation process is a crucial aspect for facilitating adoption and increasing impact. In addition, our development pipeline includes a final stage of validation and qualification meant to assess the reliability of the SONATA code and to ensure its stability.

For more information about the main improvements of this release, please visit: <http://sonata-nfv.eu/content/releases>

### About SONATA

SONATA project is an EU-funded project Horizon 2020 and part of the 5G-PPP initiative. The project has a 30 month work plan that started in July 2015. The consortium is composed of 15 partners representing the whole value chain of the Telecommunication Industry, as well as research and academic institutes.



SONATA's outcomes are published in a public GitHub repository under Apache v2.0 licence. Code and related technical documentation is available on the project website: <http://sonata-nfv.eu>.

### Learn more about SONATA

- Project website: <http://www.sonata-nfv.eu/>
- Twitter: <https://twitter.com/sonataNFV>
- LinkedIn: [www.linkedin.com/in/sonata-nfv](http://www.linkedin.com/in/sonata-nfv)
- YouTube: [https://www.youtube.com/channel/UC\\_vQQq7mjvHt4JzEkp4kppQ](https://www.youtube.com/channel/UC_vQQq7mjvHt4JzEkp4kppQ)
- ResearchGate: <https://www.researchgate.net/project/H2020-SONATA>
- Newsletters: <http://www.sonata-nfv.eu/newsletter/30>

### Contact us:

SONATA

sonatanfv@gmail.com

<http://sonata-nfv.eu/contact>