GIOCONDA

Signal Sighting from the comfort of your office

The G-RASTx Process HD & VR Signal Sighting



- Manage several projects with any number of routes
- Multiple users each with their own Logs and entries
- Switch between original footage & proposed scheme for planning and sighting
- Images, files and associated notes can be linked to any known or proposed location
- Screen capture with notes superimposed

- Height, offset & point to point measurements
- MRD and other calculations
- Multiple Chainage/Meterage readouts and GPS Co-ordinates
- Integrated SSF tools
- Fully supported by Gioconda Sighting Chair and Engineers
- Forms the basis of a Driver Briefing Package

The G-RASTx process Gioconda Route Assessment and Sighting Tools

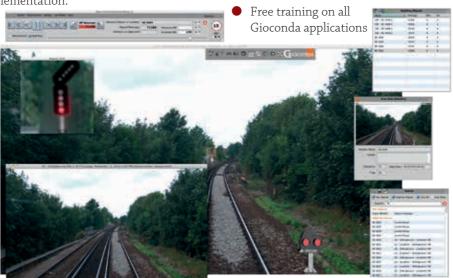
Gioconda has been involved in desktop signal sighting for many years and as such we can claim the following:

- First to develop and deliver HD Signal Sighting to a UK project (Waverley Renewals 2006)
- The only company to be awarded the SSIMs framework by Network Rail (2009)
- Gioconda material was used as the basis for the UK derogation by Network Rail to allow HD & VR models nationwide (2010)
- First to develop and deliver HD video OLE Immunisation models (EGIP 2010)
- First to develop and deliver automatic and fully integrated SSFs into the desktop sighting process (EKR2 - 2012)

As part of our continual development programme we have a need to fully understand the sighting procedure from concept to design and through to implementation. Gioconda understands that the sighting process needs to encompass many disciplines and technologies and above all the methodologies of our many clients; as such, our processes allow for manual sighting where necessary and integration with other design tools like ISP.

Gioconda's G-RASTx process incorporates all your sighting needs and is backed up by our own services including:

- GPS Video surveys including pointcloud production and asset locating
- Provision of a Signal Sighting Chair
- Chair and/or engineer supported SSF production and review
- Integrated Auto SSF tools
- Editable HD & Full VR models for Desktop Signal Sighting
- Gioconda Software designed for the sighting process
- Project Master Model Integration for IDC and similar requirements.



Giocon <mark>da</mark> Project	Gioconda	Giocon <mark>da</mark> Project	Project	Project
Create the Master Datasheet	Create Initial Forms	Update & Review the Draft Forms	Collate Forms into Final Project for review by Committee	PDF output for Signatures
Gather information regarding all objects requiring sighting and populate the Gioconda Master Datasheet The G-SSF process is ready to accept direct input from tools like ISP once they are able to provide data outputs	Using the output from the Gioconda Datasheet initial Sighting Forms are created extremely quickly These forms are automatically populated and much of the information is automatically calculated	Other information such as the Diagram, Obscuration and Screen Capture is now added to the draft form. This work can be undertaken by sem iskilled personnel A qualified individual such as the SSC Chairman will review the initial form	The Forms are now brought into the final project folder structure for review by the Signal Sighting Committee Used in conjunction with the G-RASTx software, adjustments to the form are easily made	Completed Forms can be printed during the SS Committee meeting, permitting immediate signing Future editing can easily be achieved using the G-SSF Editor
Intelligent Scheme Plan Professional Evaluation Scheme Plan Other Datasheet	G-RASTX	G-RASTX G-SSF Editor	G-RASTX	G-RASTX G-SSF Editor

HD & Full VR Signal Sighting

This process builds on our Route Assessment Tool, where the footage is correlated to a meterage specified by the project – *see separate leaflet for details*. The sighting functionality of the G-RASTx and Virtual Sighting (VST) software has been developed through use at numerous SSC meetings and is ideal for assessing sighting issues.

> Gioconda uses design data to build virtual objects – signals, signs, OLE structures and other assets. These objects are 'tracked' into the footage or added to full a 3D VR model that will be used by the Signal Sighting Committee.

Typically we work through a series of internal workshops with the project to ensure that the signalling design has been assessed adequately prior to holding an SSC meeting. This often results in less iterations and 'signing off' is readily achieved.

All the tools and calculations required to assess the signal or sign position are available, along with session logging to record actions and comments. The result is a fully documented Signal Sighting Form.

Real-time editing of the signal or object is available through the 3D VST module, allowing the user to replace, modify or move its position on the fly.

The VST is also used where major changes to the infrastructure make the HD tools unviable. Editing the complete 3D environment is possible by a trained Power User or Gioconda personnel. *See the separate leaflet for full G-VST details.*

Sighting Form Production

A Gioconda SSC Chair or the Project will populate our Master Datasheet with asset data (in the future we expect this data to come from tools like ISP).

Once complete, the datasheet is processed by the Auto G-SSF tools to generate the initial forms. These are developed into draft forms by completing signal & obscuration diagrams. Photographs, screen captures and notes are also included where possible.

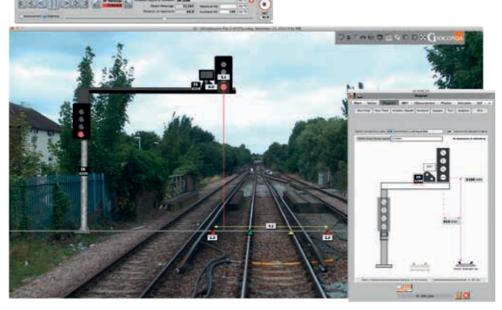
The draft forms are delivered to the Project Chair for review prior to SSC meetings. Gioconda can provide full support to this process in order ensure accuracy and completeness and the inbuilt SSF tools cover all requirements to efficiently populate the forms, make assessments and gain approval by the committee.

- MRT and other calculations are automatic
- Diagrams have been made intuitive and easily editable
- Obscuration diagrams are generated directly from the videos
- Screenshots and photographs can be dropped directly into the Photo' Pages
- A Master SSC member list can be downloaded straight to the database.

In the background, all changes to the forms are being logged for future integration and to provide a valuable history of updates.

Adopting the full G-RASTx Process has resulted in recent projects making significant programme gains.

The G-RASTx Process showing the diagram element of the Signal Sighting Form module



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