



Frequently Asked Questions



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Welcome Note

Dear Client,



Hello, my name is 'Athena'. I have been appointed as the ε-ORB Assistant and I would like to cordially welcome you to the ε-ORB family!

I have prepared this document in an effort to answer your queries. Thus, the following pages enclose valuable clarification on matters that have been questioned by our existing Clients and Shipping Stakeholders in general.

For various information our ε-ORB Team can be contacted at eorb@preventionatsea.com.cy. For activation purposes and/or technical matters please send your queries to support@e-orb.com.cy.

Thank you for choosing the 'ε-ORB', your feedback is important to us,

Yours sincerely,

'Athena'

Prevention at Sea Ltd.



1. Is the ε-ORB acceptable only on Liberian flag vessels OR any other flag too?

The Liberian Registry is the first flag registry that allowed the ε-ORB to act on board as the official electronic Oil Record Book. Since then, more registries and safety agencies have authorized the replacement of the traditional paper Oil Record Book by our software. Till now, the Cypriot registry, USCG, AMSA, Japanese registry have authorized the use of the ε-ORB.

The Chinese registry has also confirmed verbally that ships who use our software and flying foreign flags would not face complications during PSC inspections when calling Chinese ports.

The conditions set by the registries and safety agencies (AMSA, USCG) for the replacement of the traditional paper Oil Record book by our software, exist in the LISCR Marine Notice POL 012 Rev. 03 published October 2017.

However, regardless the flag, the ε-ORB software is currently requested by clients and can be used as a guidance tool in correctly filling out the traditional Oil Record Book with the aim to subsequently replace it in the future.

We are currently in contact with the following flag registries for obtaining relevant approval/authorization as above. Please request the most updated list of flag approvals at info@preventionatsea.com

- a) Marshall Islands
- b) Panama
- c) Bahamas
- d) Luxemburg
- e) Cayman Islands
- f) Virgin Islands
- g) China
- h) Singapore
- i) Germany
- j) Malta etc.



2. Do all PSCs worldwide know about ε-ORB? If not, what is the plan for this?

The Liberian Registry has issued a Marine Notice addressed to all parties involved, including the PSCs worldwide, informing them of the Liberian Registry's decision to authorize the use of the eORB on board liberian flagged ships. The Liberian registry has applied for an IMO letter to be published notifying stakeholders with regards to the use of the ε-ORB software. Relevant letters have been issued by the Japanese Registry, Cypriot registry as well as AMSA. In addition, the software is already certified by Lloyd's Register under MARPOL Annex I, reg 17 & 36 as well as MEPC Circ 736/Rev.2. The said certificate is available at <http://ε-ORB.com.cy/%CE%B5-orb/>

3. Is it an acceptable solution as per IMO?

The IMO will not provide an acceptance certificate as it is out of the IMO scope. However, the ε-ORB was built in accordance with the relevant IMO guidelines for electronic record books and it is certified by Lloyd's Register under MARPOL Annex I reg. 17 & 36 as well as IMO Circ 736/Rev. 2.

The ε-ORB software has already been demonstrated to the IMO delegates (MEPC 70) with very positive and encouraging feedback.

4. Will an authorization/approval referencing 'IMO FAL 40/19 issued on the 20th April, 2016, in regards to the usage of Electronic documents on board' would be issued by the Flag Administration.

Yes, the Liberian Registry will issue a Declaration of Acceptance to this effect.



5. Has the LISCR approval letter already been issued?

Yes, the ε-ORB is already approved and accepted by LISCR.

6. How is the system backed-up locally?

The system is backed-up locally in two ways:

- a. Automated backups are saved at a predetermined by the user time interval as well as the user can manually save a backup at any time by simply clicking the backup button.
- b. In addition, for clients who wish to have additional protection of their Oil Record Book data on board in the sudden break down of the computer, the makers provide a disaster recovery external device in which all the ORB data are transferred whenever the user plugs in the said device by initiating the backup process. In case the PC is damaged, by using the said device, the end user is able to restore the application and the latest backup on another computer.

7. How does the head office see the ε-ORB of their ships?

The head office can see in read-only mode the ε-ORB data of the fleet by visiting the eORB online platform through the Prevention at Sea (P@S) cloud portal services.

For computers not provided with an internet connection, the clients are able to transmit the said ORB data via email and for those computers having access to the internet, the data is automatically transmitted at predetermined intervals to the makers' cloud servers for:



- a) Official record keeping. Upon request, the makers will re-generate the ORB and certify that the ε-ORB data is true and valid.
- b) Reviewing the ε-ORB data in read-only mode.
- c) Processing as well as analyzing the ε-ORB data with the aim to generate customized reports referring to the ship operator's fleet or for benchmarking purposes
- d) Generating automated notifications, forwarded to the client's email address
- e) Downloading the data

Alternatively, the ship can export the ε-ORB data in pdf format and forward it to the office for review.

8. How is the system networked onboard?

In case a server is available on board, the software application can be accessed remotely from any on board remote station. The application was designed as a server oriented software but it can also be installed as a standalone application.

9. How does the ECA map get positions-GPS, manually, or other?

The ship's position can either be entered manually or automatically as taking the ship's position from the GPS is possible. However, remember that taking the GPS position is not mandatory or required by the IMO guidelines. In addition, by following the workflow of the ORB operations recording process, it is evidenced that the operation is recorded after its completion thus the GPS location the moment the ORB recording takes place will most probably not be valid.



10.If a client wanted you to incorporate the software into their current environmental system-could you do that?

Yes, it is possible and there are various solutions to achieve this goal. When such request is raised, our company will provide more details.

11.In how many versions the ε-ORB is available?

The structure behind the ε-ORB versions was recently amended to become simpler. At the moment, the ε-ORB is offered in two different versions:

- a) ε-ORB part I (in compliance with MARPOL Annex I reg 17)
- b) ε-ORB Part I and II (in compliance with MARPOL Annex I reg 17 and 36)

The clients, regardless the type of the managed vessels, can purchase the ε-ORB Part I, in case they wish to switch from the traditional paper ORB part I to the electronic ORB.

In addition, clients whose ships are subject to MARPOL Annex I reg 17 and 36 can purchase the ε-ORB Part I and II, in case they wish to switch from the traditional ORB Part I and II to the electronic ORB, or they can still purchase only the ε-ORB Part I, in case they wish to maintain on board the traditional paper ORB Part II and switch only from the paper ORB Part I to the electronic ORB Part I.

Thus, clients using the paper ORB part I and part II can select to purchase ε-ORB Part I only and maintain the paper ORB part II on board or switch from paper Part I and II to electronic ORB Part I and II.



12. Are the “individual components” mandatory?

The individual components are not mandatory. The clients can select from a list of additionally offered services and products which items meet their requirements such customization of the software by the makers, signature pad for the insertion of physical signatures in an electronic manner, disaster recovery backup device, portal use for transferring data ashore etc.

13. Please advise on what happens with the software in case the vessel is sold or is replaced. What happens with the Annual fees or cloud back-up?

If the vessel is sold, the new owner, in the case that they wish to continue using the ε-ORB, would need to purchase a new ε-ORB license. This is mandatory as each ε-ORB license is related to the vessels’ IMO number and the shipowner details. In case a change of ownership is materialized, the user will have to deactivate the software by clicking the button named ‘Change of ownership’. By following this process, the software will be deactivated, and any attempt to login will fail.

Once the software is deactivated, the new owner will be granted with a read-only access to the ε-ORB data for the last three years, as it required by MARPOL. In addition, the new owner maintains the option to re-activate the software by purchasing a new license.

As far as annual fees and cloud backup are concerned, annual fees will be charged proportionally and the cloud backup will remain available for download by the client for a predetermined time period.



14. Although the said software has been recommended for use by the Flag administration, will the marketing and support be directly from the related Flag department and or Software designer?

The marketing activities are performed by both parties ie. the Liberian Registry and the makers. As soon as the support is concerned, the software is supported by the Liberian Registry providing regulatory assistance, whilst technical support is provided by the makers with regards to the software functionality.

15. What exactly is meant by ‘ months of support’?**

The ε-ORB software is offered along with 12 months of support after the date of activation. 12 months of support means that the Client is entitled to support for the first XX months after activation of the ε-ORB, i.e. complimentary support from **Prevention at Sea** and the Liberian Flag Registry.

16. What is the selling scheme and when the software is purchased how long does it last for?

Based on the current sales policy, there are two different sales models.

- a) One off payment: when the software is purchased through the one-off payment scheme, it lasts for the life span of the vessel as long as the vessel does not change ownership. When a vessel changes ownership, the license of the ε-ORB is deactivated and the new owner must purchase a new license.



- b) Pay as You Ship (annual fee) : when the software is purchase under the subject sales model, an annual subscription is mandatory.

17. Is there any limitation in terms of number of entries or validity period?

There is no limitation of number of entries after a license has been purchased and the software is activated.

18. What are the recurring expenses we may have to bear after the software is purchased?

There is an annual maintenance and support fee of \$250/vessel; this includes technical and software help from the developers, regulatory assistance an regular updates for both regulatory changes and software upgrades. The cost for access to the cloud servers or purchasing individual components is not included in the aforementioned price.

If the software was purchased under Pay As You Ship model, the subject support fee is included in the price.

19. Is the cost per version of a software same as the cost per ship? Or one purchased software can support multiple ships?

The cost per version of the software is per ship. The licenses are assigned to the IMO number of the vessel and the shipowner.



20. Is the ε-ORB software available in the market?

Yes, there are two packages.

Liberia ε-ORB: This package is available for Liberian flagged ships.

SeaNet ε-ORB: This package is addressed to ships under flags other than the Liberian Flag. The makers i.e. 'Prevention at Sea Ltd' and SeaNet are currently working on getting approval/authorization from other flag states.

The software is also offered through the ε-ORB authorized resellers worldwide network. Contact the makers at eorb@preventionatsea.com.cy to learn more.

21. What kind of equipment should be installed on board the Vessel and in Office (casual PC or some special hardware)?

The minimum specifications are:

- Minimum Ram 2 GB. For remote stations on board, Minimum Ram 1 GB
- Recommended screen: 15" & resolution: 1280 x 768
- Window platform: Minimum Windows XP Service Pack 3
- Storage Size: 2 GB
- Processor 1 GHz



22. In case the ε-ORB is being used on board, what happens if Crew needs to continue to fill in normal paper ORB as evidence?

Our suggestion for the crew is to use both the traditional paper ORB along with the electronic version UNTIL crew members are confident that they are familiar with the ε-ORB. There is no need to continue using the paper oil record book once the use of the eORB on board is authorized and it has been activated as the official Oil Record book.

However, specific conditions must be met by the crew in order to avoid complications during PSC inspections. Visit the LISCR Marine Notice POL 012 Rev 03 to learn more about the subject conditions.

In many cases, clients have expressed interest in purchasing the software for training purposes only and maintaining for the time being the traditional Oil Record Book.

23. Where we can find Program Operation Manual, detailed description to get more knowledge regarding subject?

Prevention at Sea Ltd has uploaded a free trial version that permits a predetermined number of ORB entries to test out the software which also includes the User Manual. The trial version can be requested from the makers at eorb@preventionatsea.com.cy

In addition, please watch our ε-ORB video to get a more detailed overview of this innovative software product. You can access the informational video at the following link: <http://www.ε-ORB.com.cy/>



24. How ORB entries will be verified if there is no signature pad coming with it?

Due to the specific conditions set currently by the registries and safety agencies for the use of the ε-ORB software on board, it is mandatory to print the ORB pages and insert the physical signature by hand using a pen.

Thus, insertion of signatures via the use of the signature pad are not currently accepted as the stakeholders for a transitional time period will still be requiring the physical signature by hand using a pen.

25. Is there any support from the producer if needed for the on board installation, how will this be done and how will the data be protected against access from the outside later on?

The producer will support the vessel by physical attendance on board if it is requested by the client. In addition, the software is equipped with an internal functionality, which generates a system log file. By sending the subject file to 'Prevention at Sea Ltd', the Support Team will in most cases be able to identify what is the root cause and solve the problem. If remote access to the ship's network is available, the support team may request access to check the log files.

All data are encrypted and it is impossible to be manipulated or abstracted by an unauthorized person. In addition, the system is protected efficiently. By implementing a Role Based Access Control, it can be accessed only by an authorized user with a valid username and password. All actions are internally recorded by the system (Audit logging & Trail) and can be traced at a later stage. Thus, suspicious actions to manipulate data or access the software can be identified.



26. Is the signature pad mandatory?

The signature pad is optional. See also answer 24.

For electronically signing the ORB operations, the IMO accepts the unique credentials i.e. the username and the password to act as the e-signature of the person in charge with an ORB operational entry.

The insertion of the physical signature by hand using a pen is still required by the registries and safety agencies (AMSA, USCG) for a predetermined transitional period.

27. What is the signature pad?

The signature pad is an external device with a pen that permits connection to the computer via a usb port and can be used for posting your hand made signature in an electronic manner. As mentioned in item 26, the signature pad is not mandatory by the IMO or the flag registries as well as the safety agencies. I

28. What sort of connection onboard would you need? With the standard ship internet, how long do you think it would take to download the software?

Any type of internet connection can be used for transferring the ε-ORB data ashore. It is recommended the computer accommodating the ε-ORB system to be provided with continuous internet connection.

As far as the time required for downloading is concerned, please note that this issue depends on the existing bandwidth. If for example the internet connection is of type FleetBroadband (speed 150 kbps), it is expected that the software will be downloaded in about 16 hours.



29. Can I send the ε-ORB I received for office test to ships for testing?

If you wish to test the software on board, please contact us at eorb@preventionatsea.com.cy or eorb@lisscr.com (Liberian ships) enabling us to provide the appropriate version for testing on board ships.

30. What platform is used for the development of the ε-ORB software?

Platform Microsoft .Net and Microsoft SQL server

31. In which languages is the software available?

Currently, all texts are in English. Our future plans involve translation of the user controls to Tagalog (Philippino), Ukrainian, Russian, Spanish and French.

32. How do you get the tank tables into the software?

The end user of the makers (if requested) can insert the sounding tables into the software for customization purposes.



33. What is the price of the software?

Please go through the relevant marketing leaflet.

34. What are the backup options?

- a) Manual backup by pressing the backup button
- b) Automated backup on board at a predetermined time period set by the end user according to their preference or Company's policy.
- c) Synchronization for transferring data to the 'makers' cloud servers. With the subject service, an updated backup is always maintained ashore.
- d) Disaster recovery external backup device.

35. What about the data in between backups?

The user has the option to predetermine the time interval for the automated backups ensuring that no data will be lost.

36. Is a cloud option available?

Currently, the software application is installed on board. The IMO guidelines and the MARPOL regulations do not specify if a cloud option is permitted or not. A cloud option incorporates a strong and stable internet connection which may not be the case in some



areas worldwide thus the vessel may not be in a position to access or download the Oil Record Book for demonstration purposes upon arrival at port. In the future though, the makers will be considering such a solution.

37.If you have to change the name of the ship, what happens to the data?

The data are saved safely and upon changing the ship's name, a new Oil Record Book will 'open'.

38.How much of a resolution of the screen is need?

The minimum suggested screen resolution is 1280X768.

39.Are the software pages numbered?

Yes.

40.How often can you have access to the software?

Unlimited access is permitted as soon as the user holds a valid username and password.



41. What are the system requirements?

- a) Minimum Ram 2 GB. For remote stations on board, Minimum Ram 1 GB
- b) Recommended screen: 15" & resolution: 1280 x 768
- c) Window platform: Minimum Windows XP Service Pack 3
- d) Storage Size: 2 GB
- e) Processor 1 GHz
- f) How big is the data transfer?

With rough calculations, no more than 20-30 MB per month.

42. Is there potential for automatic valve connection?

It is in the maker's future plans to incorporate automated detection of valve status (open/close) as well as volume inside tanks and transfers through the piping diagram.

43. What if the oil water separator fails? Do you get a dispensation from flag?

The ship operator should first contact the Flag Administration for obtaining such a letter. In case we receive such a request, we will forward it to the Flag Registry and wait for their further instructions whether additional action is required from our end.



44. What if you have no time, the software is down, and you are calling into port? Worst case scenario. What if everything fails?

The Oil Record Book can be saved on board in a pdf format or it can be downloaded from the Cloud servers in a pdf format. If the disaster recovery external device is available on board, the application along with the latest saved backup will be retrieved.

45. What if the server fails?

There are several options for the data to remain secured.

46. Does the office need a separate license to access the information on the portal?

Yes, for those clients wishing to have access to ship's ORB data ashore the use of the cloud portal service is necessary thus, a unique username and password will be provided to the ship operator.



47. Has this software been accepted by Chinese authorities?

The makers are in contact with the Chinese Authorities and other major flags and various Authorities for demonstrating the software. Ships using the software and flying foreign flags will not be facing complications during PSC inspections at Chinese ports. This information was provided verbally by MSA and at the moment relevant confirmation letter is expected.

48. What if you are transferring volumes and the numbers don't match the content in the tanks?

It is not possible for the user to record such operation as the software will not allow such recording.

49. Is there a quick guide or manual?

Yes, both are available.

50. What happens in case of change of ownership?

The user should click the button named 'Change Ownership'. By clicking the said button the software will be deactivated and the new owner will have access to the Oil Record Book data for the last 3 years.



51.If an error message pops up, can you still keep filling out the entry?

If an error message pops up, it means that the said action is impossible to be performed thus the software will not allow the user to proceed further. However, if a warning message appears, the user can proceed by clicking 'ok'.

52.Do chief engineers have an opportunity to override an error?

It depends from the type of error. For a wrong official entry, the C/E has the option to strike through the said official recorded entry.

53.What if there are users on the same vessel with the same name and same position?

This is an extreme scenario but in order to avoid such a complication, the date of birth is incorporated.

54.What if the user goes on many vessels throughout the fleet?

If the makers receive such information from the clients, they can provide all ships with the same account (username and password) permitting access to the said person.



55. What is the USCG take on the software?

So far, the feedback from the USCG is positive and no objection exist in the use of the software. According to their advice, the USCG Officers will be requiring from the ships to review the ORB printed pages as generated by the software as no instructions exist for the time being to allow the review of the electronic Oil Record Book sitting in front of the PC screen.

56. Have you approached the Canadian Authorities?

Not yet. It is in the makers' intentions.

57. What about other flags?

Soon, the makers will be announcing the authorization granted from other major flags.

58. Who creates the passwords?

The first-login user. However, for all users that have been created by the first-login user, the system will request from them to reset their password during their first-login.



59. What is the cost of support?

250\$/ship/year.

60. What is the price of the signature pad?

See the relevant marketing leaflet.

61. Have you contacted CDI and when do you plan to meet with them?

Not yet, but we intend to do so beginning of next year. So far BIMCO, OCIMF, IMO have been contacted with positive results.