



TerraLens

Customer/Technical Support Handbook



Kongsberg Geospatial

Revision Status

Revision	Date	Description
Rev 1	August 2007	Revised Document to reflect current organization and document requirements
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Rev 3	April 2012	Revised copyright and corporate name
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1 Preface

About the TerraLens® Platform

TerraLens, formerly sold as InterMAPhics®, is available as a family of products:

-  **TerraLens Core** Core SDK and developer libraries
-  **TerraLens Server** OGC Map tile server, optimized for performance
-  **TerraLens UI** HMI / UI development foundation with multi-touch support
-  **TerraLens Mobile** Mobile SDK for Android apps
-  **TerraLens Web** WebGL developer framework
-  **TerraLens Creator** Advanced map styling and packaging toolkit

While the product names and packaging have changed, the core functionality has not. The version numbering is maintained from the former InterMAPhics product library, and many of the internal libraries and namespaces still reference InterMAPhics.

You can view a full breakdown and description of the TerraLens geospatial platform and products on the Kongsberg Geospatial website at: <https://www.kongsberggeospatial.com/products>.

2 Introduction

The intent of this Customer/Technical Support Handbook is to provide you, the customer, with a greater understanding of the customer support services available from Kongsberg Geospatial. It describes all of the support services available to you and enables you to determine the most effective way in which to obtain information you may require when using Kongsberg Geospatial's software.

3 Software Support and Maintenance

Overview

At Kongsberg Geospatial, our customers are considered our most valuable assets. We believe that providing a quality product together with an effective support system for our customers is the key to customer loyalty.

In order to meet the demands of our customers and the marketplace, Kongsberg Geospatial provides a comprehensive software support and maintenance program. Excellent software support provides the keys to maintaining a high level of customer satisfaction: prompt response and timely, accurate resolution to questions and problems.

Eligibility

Software support and maintenance is available to all Kongsberg Geospatial customers during the 90-day warranty period when a product is initially purchased and on a yearly basis through the purchase of maintenance and support contracts.

Product Categories

Software support and maintenance is available for all products distributed by Kongsberg Geospatial. These products can be categorized as follows:

- **Category A:** Products developed exclusively by Kongsberg Geospatial. These consist of the Terralens products.
- **Category B:** Products developed by another vendor and distributed by Kongsberg Geospatial.

The policies described in this handbook reflect the policies which are implemented for all **Category A** products. **Category B** products may require that the original vendor be consulted.

4 Customer/Technical Support Organization

Overview

Our Customer/Technical Support representatives and on-line support systems enable us to deliver comprehensive support to all our customers.

First-line Support

First-line support personnel are the first employees encountered when requesting technical assistance for a software product. These support specialists handle the support calls received through the technical support communications channels. Technical support specialists are trained in both the technical and functional aspects of the products; the majority of questions and problems reported to Kongsberg Geospatial are handled by the first-line support personnel and, in most cases, solved immediately. However, if a problem cannot be resolved within a reasonable amount of time, the first-line support personnel may call upon the second-line support personnel.

Second-line Support

Second-line support personnel are software developers specializing in software support and problem resolution. Second-line support personnel resolve problems which were not resolved by first-line support personnel. Products of Category B may require that another software vendor provide second-line support to the Kongsberg Geospatial first-line support personnel.

Product Development Support

Product developers specialize in product design and development, and assist in problem identification and resolution as requested by the second-line support personnel. Products of category B may require that another software vendor provide product development support to the Kongsberg Geospatial second-line support personnel.

Field Support

Product consultants provide on-site support when it is requested by a customer. They provide problem investigation and resolution during on-site visits. These services are provided on a mutually agreed upon per diem rate basis.

5 Communications Channels

Overview

We believe that effective communication both internally and externally is the key to implementing a successful and responsive Customer/Technical Support organization. In addition to the Technical Support hot line, the Kongsberg Geospatial Customer/Technical Support organization may also be accessed by customers through E-mail and Fax. Internally, the Customer/Technical Support organization, the Product Development teams and the Product Sales and Marketing teams may be collectively called upon as required to support our customers in the most effective manner possible.

Technical Support Hot Line

Call the technical support hot line, 1-800-267-7330 from Canada or the United States. For technical support outside North America call +1-613-271-5500 and ask the attendant for the Technical Support group.

E-Mail

Send E-mail to tech.support@kongsberggeospatial.com

Fax Machine

Send a Fax to +1-613-591-0774 addressed to "Technical Support".

On-Line Support Systems

Although not accessed directly by customers, on-line problem tracking systems are employed internally by Customer/Technical Support representatives to collect, record and track reported problems and monitor customer requests for software enhancements. On-line databases track product information

for each customer. On-line support systems and internal E-mail systems provide the basis for internal communications at Kongsberg Geospatial and ensure accurate and consistent sources of information.

6 Software Maintenance

Overview

All Kongsberg Geospatial products adhere to certain standards in the areas of product maintenance. Maintenance is distributed periodically as software updates or software fixes and may include one or more of the following items:

- Source code
- Object code
- Documentation updates
- Other Information about the product

Software Updates

Software updates are minor releases of the software which correct known problems or incremental releases of functionality. Software updates are distributed to Kongsberg Geospatial customers with current maintenance contracts on an as-needed basis for the product.

Software Fixes

When a problem is identified in a Kongsberg Geospatial product, a software fix is implemented, tested and published to correct the problem. The software fix is then entered into the tracking system to ensure that it is included in the next software update or release. Software fixes are distributed immediately to the customer who reported the problem, whenever possible, and to all other customers in the next major software update or release.

Notification of Product Releases

A release is a substantial functional enhancement to the product which is made generally available pursuant to:

- the assignment of a new release number
- may include assessment of an additional licensing fee separate from the original licensing fee

Notification of product release is provided for your consideration of purchase if additional fees are required.

7 Obtaining Assistance

Overview

Upon determining that assistance is required, there are a number of steps that should be followed before, during and after the initial contact with the Kongsberg Geospatial Customer/Technical Support representative. The following checklists summarize these steps, illustrating the customer's responsibilities when requesting technical assistance, and what happens at Kongsberg Geospatial once a request for assistance is received.

Before Contacting Customer/Technical Support

When a software problem is suspected, collect diagnostic data that may help isolate the problem. This includes documentation, tapes, dumps, and any other relevant material. Also try to describe the sequence of activities leading up to the error. Collecting this information is a crucial step as it helps identify the problem and isolate the particular area of the software that may be causing the problem.

Assign a severity level to a problem using the following as a guideline:

Level	Severity	Description
A	Serious	Critical impact which makes the product unusable.
B	Major	A critical error which does not permit the use of major functionality.
C	Minor	An error disabling only certain non-essential functionality.
D	Cosmetic	An error having little impact on an application.
E	Requests for Enhancements	Requests for new functionality in the product.

Table 1: Assigning a Severity Level to a Problem

When choosing a severity level, also consider the stage of development. For example, a problem report should be logged for a function that might crash an application. However, if the product is still in the early stages of development, it may be possible to put the function aside until a later date. In this case the severity level could be entered as minor.

Gather together the following information:

- The product name and release number of the product for which assistance is required.
- Description of the hardware platform (host and graphics engine) on which the product is installed.
- Version of the operating system running on the hardware platform.
- For UNIX systems, the version of the windowing system running on the hardware platform.
- Any diagnostic information collected above.

If a problem is determined to be within a Kongsberg Geospatial product, each error, defect in the product or related document will be classified for correction based on the following criteria:

Class	Error	Criteria
A	Fatal	Errors preventing all useful work from being done.
B	Severe Impact	Errors which disable major functions from being performed.
C	Degraded Operations	Errors disabling only certain non-essential functions.
D	Minimal Impact	An error having little impact on an application.

Table 2: Correction Criteria for Software Product Defects

Contacting Customer/Technical Support

Customer/Technical Support may be contacted by any of the means, (phone, fax, e-mail), described in the Communications Channels section of this handbook.

If contacting Kongsberg Geospatial by telephone and all Customer/Technical Support representatives are engaged at the time of the call, leave a message and the call will be returned in a timely fashion. Our policy is to return contacts (phone, fax, e-mail) in sequence by the end of the same business day on which they were received. If a contact is received near the end of a business day and you cannot be reached before the end of business hours, an attempt will be made to return the call the morning of the next business day.

Kongsberg Geospatial shall only be required to respond in the times listed for reports received between 9:00 a.m. and 5:00 p.m. Eastern Standard Time (EST) or Eastern Daylight Time (EDT) when applicable on weekdays, except Canadian Holidays. If a report is received outside these hours, the response time shall commence at 9:00 a.m. EST or EDT when applicable, the following business day.

Resolving the Question or Problem

The majority of questions or problems are resolved within 24 hours by one of the first-line Customer/Technical Support representatives.

When a suspected problem cannot be identified immediately, forward all information which has been collected to date (as indicated above within the “Before Contacting Customer/Technical Support” section) to the Technical Support representative. Upon receipt of a problem, the Technical Support representative will:

- acknowledge receipt of the suspected problem via e-mail,
- begin analyzing the suspected problem,
- communicate with engineering so that additional technical staff may be assigned as required to analyze the suspected problem.

NOTE: To ensure the suspected problem has been accurately identified and to validate any subsequent code changes to address the suspected problem it may be necessary to work with technical staff to create a reproducible scenario which may be in the form of a simple application.

If the suspected problem is traced to a software error in Kongsberg Geospatial’s code, the problem will be entered into the problem tracking system and a patch may be issued if practical, useful or feasible, otherwise the problem will be fixed in a future update of the product. Fixes are communicated over the phone or via Fax, with software provided via FTP, or on hardcopy through the mail on CD-ROM or DVD.

Kongsberg Geospatial shall use reasonable efforts to respond to errors, defects in the product or documentation according to the following schedule:

Classification	1st Level Response	2nd Level Response	3rd Level Response
A	2 hours	1 day	30 days from request
B	8 hours	4 days	30 days from request
C	24 hours	12 days	Next release
D	5 business days	No second level remedy required	Next release

Table 3: Schedule of Response Classifications

Response Identification
1st Level - Acknowledgment of error.
2nd Level - Resource assigned to resolve the identified defect.
3rd Level - Official object code release and/or updated electronic documents can be manufactured upon written customer acknowledgement of resolution and requested delivery.

Table 4: Response Identification Classifications

Verifying Problem Resolution

Apply the software fix to the product when it is received.

Contact the Kongsberg Geospatial Technical Support representative handling the problem to confirm that it has been resolved.

Escalating a Problem

If it is determined that the severity level of a problem needs to be escalated, contact the Customer/Technical Support organization and request that the severity level be upgraded.

If it is felt that a problem is not being adequately addressed by the Customer/Technical Support organization, the problem can be further escalated by contacting one of the following:

- Manager of the Customer/Technical Support Organization
- Your Sales Representative
- Vice President, Engineering/Operations
- President

8 Customer Education

In addition to the software support and maintenance services described above, standard courses are offered to customers for many Kongsberg Geospatial products. These regularly scheduled courses may be held at the Kongsberg Geospatial facility or at the customer site. The lectures are given by well qualified instructors. The course combines lectures with on-line tutorials to ensure that users get the most out of Kongsberg Geospatial's software.

The variety and complexity of the application for which the Kongsberg Geospatial products are used often requires specialized training. Product specialists are available to design and teach courses which will enable users to become proficient in the use of Kongsberg Geospatial's software as quickly as required. These courses are developed at the request of the customer on a mutually agreed fixed price or per diem rate basis.

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