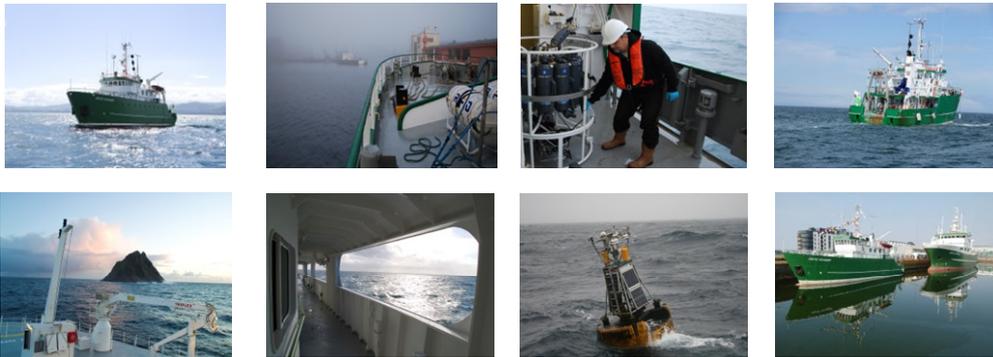


R.V. Celtic Voyager

Vessel User Guidelines



Research Vessel Operations
Marine Institute

TABLE OF CONTENTS

1. RESEARCH VESSEL <i>CELTIC VOYAGER</i>	1
2. JOINING THE VESSEL	2
3. SAFETY AND OPERATIONS	4
4. RESPONSIBILITIES – MASTER & CHIEF SCIENTIST.....	6
5. RESPONSIBILITIES – ALL SCIENTIFIC PERSONNEL.....	8
6. ACCOMMODATION FACILITIES	9
7. VESSEL FACILITIES	10
8. WORKING HOURS	11
9. VOICE & DATA COMMUNICATIONS FROM VESSEL.....	12
10. BULLYING, HARASSMENT, SEXUAL HARASSMENT POLICY AND COMPLAINTS PROCEDURE.....	14
APPENDIX I – BERTHING PLAN – CELTIC VOYAGER.....	16
APPENDIX II – VESSEL COMMUNICATIONS, IT & INSTRUMENTATION BRIEFING	17
APPENDIX III – COMMUNICATION STRUCTURE.....	22
APPENDIX IV – CONTACT DETAILS	23
APPENDIX V – DRUG & ALCOHOL GUIDELINES.....	24

1. RESEARCH VESSEL *CELTIC VOYAGER*

Research Vessel Operations is the section responsible for the management, development and promotion of the state's research vessels, specifically the R.V. *Celtic Voyager*, the R.V. *Celtic Explorer* and the *Holland I* deepwater ROV. The team is also involved with other aspects of sea-going research, managing the Foreign Vessel Observer scheme, and the current ship management contract with our service provider P&O Maritime Ltd.

The R.V. *Celtic Voyager* is a 31.4m multi-purpose research vessel. The vessel has wet, dry and chemical laboratories, which are permanently fitted with standard scientific equipment and can accommodate 6 - 8 scientists with a maximum endurance of 14 days. The vessel is manned with a very experienced crew who are highly skilled with the handling and deployment of scientific equipment.

The R.V. *Celtic Voyager* facilitates the collection of fisheries, geophysical, oceanographic and environmental data and provides practical training for the next generation of marine scientists. This research is of crucial national importance, to ensure the development of Ireland's vast natural resource in a sustainable manner.

The following notes are provided to let all personnel joining the R.V. *Celtic Voyager* know, in advance, what their responsibilities are, and to provide information which will be of use during their time on board.

Please read through these notes carefully and sign the sheet provided on signing on the vessel to indicate that you have read, understood and will abide by the guidelines.

2. JOINING THE VESSEL

- 2.1 Medical Certification - All scientific staff must be in possession of a valid **'Seafarer's Medical Certificate'** (ENG 11 or acceptable alternative) and carry the **original certificate** with them to the vessel. The 'Seafarer's Medical Certificate' must be valid for the period of the survey. If a scientist is aware that they have a condition when going to sea, which contravenes the 'Seafarer's Medical Certificate', they must inform the Chief Scientist or Master immediately. All scientists must declare to the Master if they are using prescribed medicines. If a scientist joining the survey is pregnant, she must obtain doctor's clearance to participate in the survey, which should include details of work involved and distance from the shore.
- 2.2 All scientific staff must be in possession of a **valid Personal Survival Techniques (PST) Certificate** (formerly Sea Survival) as recognised under STCW 95.
- 2.3 All scientists should bring a passport or National ID with them on board the vessel.
- 2.4 Personal protective equipment is required at all times when working on the aft deck area or in the proximity of moving equipment or when advised by ship's crew. Hard hats and lifejackets are provided on board but users are to bring personal safety boots or wellingtons and overalls.
- 2.5 Cabin accommodation on board will be available for occupation from 12:00hrs on the first day of mobilisation unless otherwise previously arranged. The Chief Scientist is requested to fill out a blank cabin allocation form and forward it to Research Vessel Operations (RV Operations). Cabins contain customer feedback forms which should be returned to RV Operations in the envelope provided. Please note that your comments will be treated with the strictest confidentiality.
- 2.6 All scientific staff are to attend a **formal safety briefing** and familiarisation tour prior to sailing on the vessel. The time of this briefing will be agreed at the pre-cruise meeting. This is mandatory under current shipping legislation. At this briefing, full information will be given by ship's staff relating to likely emergencies, safety parameters and specific advice relating to the ship and the operating programme. The Chief Scientist may also use this opportunity to brief the Master and ship's company on the scientific objectives. **Note:** scientists will be requested to sign on as visitors to the vessel prior to receiving the formal safety briefing.
- 2.7 All scientists are required to sign on the ship's articles and abide by the clauses of that document. All scientific staff are requested to assist the Master by ensuring that they sign off the Ship's Articles before leaving the vessel.
- 2.8 The Marine Institute (MI) operates a zero tolerance policy towards the use of illegal drugs or substance abuse e.g. aerosols. Intoxicant testing may be carried out on board on a *'with cause'* or *'post-accident'* basis. This means where/whenever a person appears to be under the influence of an intoxicant or when a person is involved in an accident or injured and the circumstances suggest that intoxicants may be involved. Details of this testing procedure are outlined in Appendix V.

- 2.9 The R.V. *Celtic Voyager* is a "dry" ship and, as such, it is **not permitted to bring alcohol on board** the vessel during any part of the charter period. Prior to going on duty, all vessel users shall observe a period of abstinence from alcohol for at least four hours. In the event that the vessel is in port for reasons such as weather standby, equipment repairs, staff exchanges, cruise breaks etc., all persons must be fully aware that while it is permissible for persons to consume alcohol ashore, all vessel users must **act responsibly and drink sensibly to avoid intoxication**.

The vessel master may carry out intoxicant testing on a *'with cause'* and *'post-accident'* basis only. In all cases, where the use of intoxicants are suspected, the decision whether to invoke the *'with cause'* or *'post-accident'* testing procedure will be made by the Master after consultation with the Chief Scientist. If the Chief Scientist is suspected of being under the influence of an intoxicant, then the decision about testing will be taken by the Master after consultation with the First Officer. Full details of the alcohol testing procedures are outlined in Appendix V.

Positive Test Results - In the event of a positive result, the person will be required to remain in their cabin until arrangements are in place to enable the person to disembark.

Vessel users who have been requested to leave the vessel due to alcohol misuse, or those who been observed to have consumed excessive amounts of alcohol while ashore, may not be permitted to participate in future surveys onboard Marine Institute vessels for a period of up to 2 years.

This decision will be made at the discretion of the Marine Institute. If the vessel is due to sail, and a member of the scientific party is found to be unfit to put to sea due to alcohol intoxication, that individual will be put ashore so as to allow the vessel to perform its duties. The cost of any ship time lost due to the aforementioned reasons shall be to the vessel user's account. **For Marine Institute staff a formal disciplinary hearing will take place and the disciplinary action to be taken will be in line with the Institute's disciplinary procedure. For non-MI scientists, the MI will inform their respective employer/organisation.**

- 2.10 Under the International Ship and Port Facility Security (ISPS) Code all ship's crew may be searched at any time going on or off the vessel. Failure to comply with such a request will result in personnel not being allowed join the vessel.

3. SAFETY AND OPERATIONS

- 3.1 The Master is responsible for the safety of all personnel aboard the vessel. Posted notices and directions are to be followed by all and special care should be taken when hazardous conditions exist e.g. excessive ship motion.
- 3.2 If you believe something is unsafe, inform the Chief Scientist or a member of the crew. Don't assume that somebody else will notice it.
- 3.3 All scientists working on board the R.V. *Celtic Voyager* sign on the vessel as crew and the vessel insurers (the Ship owners' Mutual Protection & Indemnity Association (Luxembourg)) have stated that for the purposes of insurance and liability cover *“their activities will not be as per usual seamen but as operational scientists”*. As such, all scientists working on board MI vessels are permitted to assist in the operation and deployment of scientific equipment, which includes, but is not limited to the deployment and recovery of CTDs, SVPs, small grabs, small corers and underwater cameras. This list is not exhaustive and scientists should consult with the Master to see if it is permissible to assist the deployment and recovery of other scientific equipment; however it is important to note that the final decision in this matter rests with the Master of the vessel. If any scientist is uncomfortable in assisting in any of the aforementioned activities then there is no obligation on him/her to do so.

Qualified and experienced third party contractors hired by the Marine Institute and marine vessel users may participate in ROV deployments, coring, seismic or other operations. With respect to fishing operations scientists may sample the catch from the nets once the nets, weights and doors have been brought on board. The installation of net-monitoring sensors can be carried out before the nets are shot and can be uninstalled once the nets have been brought on board on completion of the tow. For safety reasons, it is **NOT permissible for any member of the scientific party to assist or participate** in the following operations:

- **shooting or hauling of fishing nets,**
- **deployment and recovery of moorings and buoys, and**
- **heavy coring and/or grab operations.**

Scientists are only permitted to operate winches when the winch can be controlled using a deck lead from within the Dry Laboratory and is being used for specific scientific purposes e.g. Side Scan Sonar, CTD or Pro-Net control. Scientists are not permitted to use any of the vessels cranes.

- 3.4 The Chief Scientist should **report all accidents or near misses involving scientific staff or equipment to the Master, RV Operations** and to the Human Resources Section of the Marine Institute, either immediately or during the regular shipboard meetings. The Master has overall responsibility for the safety of the ships company and will record, where appropriate, any accidents. The Chief Scientist shall inform the Master of any illnesses or injuries amongst the scientific party, whereupon the Master decides on the appropriate course of action. Vessel users may be required to input into the review or completion of a risk assessment following an incident and may be required to complete a written statement in the event of a serious incident.

- 3.5 Please note that Vessel Users carry and use their own equipment on board the vessel at the equipment owner's risk.

- 3.6 Chief scientists should be aware of the requirement for scientific personnel to have adequate rest period in the course of survey. Watch systems and survey planning should ensure that all members of the scientific party have adequate rest periods.

4. RESPONSIBILITIES – MASTER & CHIEF SCIENTIST

- 4.1 The Master has overall responsibility for the safety of the vessel and its full complement.
- 4.2 The decision to abandon work due to inclement weather or other factors should be reached between the Chief Scientist and the Master. However, if the safety of the vessel and its complement is of concern, the final decision rests with the Master. Should the Chief Scientist consider a decision to abandon work unreasonable then he/she should consult with RV Operations at the earliest possible opportunity. Any conflicts that arise between the Chief Scientist and the Master that cannot be resolved during the course of the survey should be communicated to RV Operations at the earliest possible opportunity. Throughout the survey all the scientific party are directly answerable to the Chief Scientist and he/she should assume this role as scientist in charge. Any general directions from the Master to the scientific complement should be channelled through the Chief Scientist.
- 4.3 The Chief Scientist is the primary liaison between the scientific complement and the Master.
- 4.4 The Chief Scientist is responsible for the overall execution of the scientific programme as laid out in the pre-cruise plan/sailing instructions. During the course of the survey the Chief Scientist oversees the scientific operations and adapts/adjusts the programme if he/she sees necessary in order to obtain maximum scientific value. The Chief Scientist may modify the cruise programme freely to suit conditions taking best possible advantage of weather and unexpected observations.
- 4.5 The Chief Scientist is responsible for the safe conduct of scientific work, the operation of his/her scientific equipment and management of the scientific complement. In planning for the cruise he/she should make sure that the scientific complement on board is adequate to accomplish the objectives of the survey programme.
- 4.6 The Chief Scientist is requested to make time available to brief the Master and ship's company on the scientific objectives after the formal safety briefing (Section 2.6), or as soon as possible after sailing and at agreed intervals during the cruise.
- 4.7 RV Operations shall be the point of contact for the Chief Scientist ashore on all operational and logistical issues. Please refer to the table in Appendix IV for relevant contact details.
- 4.8 Good communication with RV Operations and the Master is essential to ensure a professional working relationship, and a shared understanding of the survey tasks and objectives should ultimately ensure the completion of the survey programme. The preferred communications process is outlined in Appendix III.
- 4.9 Daily meetings between the Chief Scientist, the Master and others, as appropriate are recommended to ensure ongoing communication during the survey programme. These informal meetings should aim to update on the scientific programme and to discuss and resolve any problems that arise. Topics to be covered will normally be of scientific, technical and logistical nature, but may also include any personnel, housekeeping and safety issues.

- 4.10 Under extreme circumstances e.g. illness, harassment issue, family bereavement etc. arrangements shall be made by the Chief Scientist and the Master in consultation with RV Operations to return the vessel to port.

5. RESPONSIBILITIES – ALL SCIENTIFIC PERSONNEL

5.1 Operation of Cruise Programme - Operation of the cruise programme requires ongoing communication between scientists and the ship's personnel. If the Chief Scientist has assigned you to liaise with the bridge, please keep the following in mind:

- Keep the watch informed.
- Give the bridge advance notice on work site coordinates.
- If you are searching for an appropriate site or are awaiting results before you make your next move, please tell the bridge what is happening.
- **NEVER** put any equipment over the side without first consulting the bridge.

5.2 On Watch - Be punctual when you are scheduled to go on watch. You should report 15 minutes before the start of your watch to allow those going off watch to brief you on progress. Make sure you understand all aspects of what is happening and do not let the previous scientist on duty leave the work area until all uncertainties are cleared up. Determine in advance in which cabin your relief is situated so that if they need to be woken, this can be done with a minimum of disturbance to others.

5.3 Scientists' Responsibilities for Labs - It is the responsibility of the scientific complement to ensure that the ship's dry, wet, chemical, water laboratories and scientific freezers and fridges are left in a clean and tidy state, free of user equipment (unless otherwise agreed with RV Operations) and ready for use by the scientific party on the next survey. General cleaning of these labs should be carried out each day and a thorough cleaning carried out at the end of survey.

The Chief Scientist should oversee the removal of all samples at the end of the survey. All samples should be clearly labelled and the fridge and freezer should be empty of samples at the end of the cruise unless otherwise agreed with RV Operations.

The Chief Officer will inspect the laboratory spaces before the end of the survey. All biological samples collected during the course of a survey are the property of that particular survey. The Chief Scientist will advise the Master, when fish samples are ready for disposal or sharing amongst the crew or scientific party and will arrange for fish that are no longer required to be left in the designated area outside the wet lab for collection by crew/scientists. **No fish samples should be removed from the laboratory or disposed of until the Chief Scientist has advised accordingly.**

5.4 Waste materials gathered during survey - Scientists should be aware that any anthropogenic waste material e.g. plastics gathered when engaged in specific operations e.g. trawling/beam trawling, should not be disposed of in the sea, they should instead be stored on board and disposed of correctly when the vessel reaches port.

6. ACCOMMODATION FACILITIES

- 6.1 Scientists will be allocated a cabin and will be asked to sign a form to verify the acceptable condition of the cabin upon embarkation. Before disembarkation the cabins will be inspected to ensure that they are left in a satisfactory condition.
- 6.2 All scientists must ensure that cabins are kept clean and tidy and should note that there will be weekly inspections of cabins by members of crew. A list of the duties and areas to be cleaned by scientists is displayed in each cabin. Any defects in the living accommodation should be reported to the Master as soon as they have been observed. The cabins should be cleaned thoroughly before departure and will be inspected by the Chief Officer; all defects in the cabin should be reported as soon as they are noticed. Rubbish bins should be emptied into the garbage disposal.
- 6.3 The disposal of razor blades down the toilets is absolutely forbidden.
- 6.4 The Voyager Toilet System: The R.V. *Celtic Voyager* toilet system is a vacuum system and is prone to blockage through misuse. Vessel users are asked to pay careful attention to the briefing on usage of vessel toilets during induction tour on the vessel. Users are advised that the system is not able to handle large volumes of paper or other material. Disposal of sanitary towels is forbidden using the toilet system. Users are advised to use the sanitary bins provided. The vessel toilets will block if misused. Users are advised to inform a member of the crew immediately in the event of toilet blockage.

7. VESSEL FACILITIES

7.1 The vessel shall provide all vessel personnel with 3 meals during the 24 hour working day - breakfast, lunch, dinner and a self-service reheat meal for duty personnel at night. Self-service beverage and snack facilities shall be available 24 hours a day.

7.2 Flexibility of meal times to support the working programme of personnel on board shall be paramount but normally meals shall be available during the following times on the R.V. *Celtic Explorer*:

Breakfast:	07:30 – 08:30
Lunch:	12:30 – 14:00
Dinner:	18:00 – 19:30

7.3 Personnel should assist the catering crew by scraping their plates into the suitable bins and placing used plates / cups etc. on the racks for cleaning.

7.4 Working clothes should not be worn in the mess room, lounges or dining area. Overalls and work boots should be removed in the changing rooms before entering the vessel's communal areas or cabins.

7.5 Washing Machines are available for use by the scientific party. Please abide by the instructions for use, posted adjacent to the facilities.

7.6 Bed linen, soap and towels are provided. When you need fresh linen etc., bring your old linen to the laundry for washing.

7.7 Video, DVD and Library facilities are available for the entertainment of both crew and scientists. These are located in both lounges.

7.8 **Smoking is strictly prohibited** on board the vessel, except on open deck areas.

8. WORKING HOURS

- 8.1 The scientific watch system will be decided by the Chief Scientist at the start of the survey and the Master informed. Watches should be structured to ensure scientific personnel have adequate rest periods throughout the duration of the survey. Details of the watches should be posted on the notice board.
- 8.2 The watch system on board the vessels is generally 4 hours on / 8 hours off for Officers, with the ship's catering staff working to a 'daywork' routine.
- 8.3 As there may be somebody asleep at all times while the vessel is at sea, it is imperative to remain quiet when below decks. Please avoid slamming doors and talking in the corridors.

9. VOICE & DATA COMMUNICATIONS FROM VESSEL

Access to e-mail is a benefit provided to all users upon joining the Marine Institute vessels. This access is limited due to the nature of the communications systems on each vessel. Users should be aware that all e-mails sent are representative of the Marine Institute and P&O Maritime Services Ltd. Therefore, there is an obligation on vessel users to respect this facility and use it in a professional manner. The Marine Institute and P&O Maritime Services Ltd reserve the right to check e-mails and ensure that inappropriate materials are not being circulated.

While e-mail is provided as a work tool, it is accepted that there will be some personal use within reason. With this privilege comes responsibility and accountability, if issues arise regarding possible abuse of these tools, the Marine Institute and P&O Maritime Services Ltd reserve the right to investigate and/or remove access. The same general guidelines also apply to the browsing of web, ftp sites and to the contents of emails sent using Marine Institute/P&O Maritime Services Ltd email accounts. Abuse of the email facility by a vessel user may result in a formal or informal complaint (see Section 10).

9.1 Internet Policy (General)

The R.V. *Celtic Voyager* has access to the Internet through any computer/laptop connected to the computer network which is enabled with internet access. Such access enables vessel users to obtain information specific to their role and enables two-way communication with sites appropriate to that role.

While Internet access is provided as a work tool, it is accepted that there will be some personal use within reason. With this privilege comes responsibility and accountability, if issues arise regarding possible abuse of these tools, the Marine Institute and P&O Maritime Services Ltd reserve the right to investigate and/or remove access.

When using the Internet, vessel users should be aware that while the Internet gives the impression of anonymity, it is not a truly anonymous medium. A visit to a web site, ftp site or any other transaction using the Internet Protocol (IP) can be externally tracked by a third party to the Marine Institute and P&O Maritime Services Ltd. For this reason vessel users should not use the Internet in a way that might bring the Marine Institute and P&O Maritime Services Ltd into disrepute. Examples of such usage include, but are not limited to:

- Accessing web or ftp sites on which material is displayed that is illegal under Irish Law, or the law of any jurisdiction in which a member of staff may be accessing the internet from, or material that is likely to give offence on the basis of a person's gender, sexual orientation, religious beliefs, marital status, nationality, race, or membership of the travelling community.
- Posting material to a bulletin board or web site that might give offence as above, or where views of a similar nature are regularly posted.
- Posting material to a bulletin board that brings the policies or operations of the Marine Institute and P&O Maritime Services Ltd into question.

The Marine Institute and P&O Maritime Services Ltd also have a duty of care to all their employees. All members of staff have a right to work in an environment free from harassment on the basis of his or her gender, sexual orientation, religious beliefs, marital status, nationality, race, or membership of the travelling community. On this basis, all vessel

users should have due regard for those working around them when using the internet, and should not view material that could result in their colleagues accidentally viewing items that are offensive and could be construed as harassment.

Users should be aware that even if there is not a person in the room at the time such material might be viewed, it may later become apparent as a result of system files, browsing histories etc. being inadvertently opened by someone else. Abuse of the email facility by a vessel user may result in a formal or informal complaint (see Section 10).

Please see Appendix II for details of the specific procedures for use of e-mail, internet and voice communication on the vessel.

10. BULLYING, HARASSMENT, SEXUAL HARASSMENT POLICY AND COMPLAINTS PROCEDURE

10.1 Bullying and Harassment

RV Operations is committed to providing vessel users with an environment free from bullying and harassment and all vessel users will be expected to comply with this policy. The policy applies to harassment by any member of the scientific compliment, crew member, contractor or other person with which a vessel user might reasonably expect to come into contact with while the vessel is in port or at sea.

Section 32 of the Employment Equality Act 1998 defines harassment as any act or conduct including:

- Spoken words or gestures.
- The production, display or circulation of written words, pictures or other unwelcome material that could reasonably be regarded as offensive, humiliating or intimidating.
- Sexual gestures.
- Displaying sexually suggestive objects, pictures, and calendars or sending suggestive and pornographic correspondence.
- Unwelcome sexual comments and jokes.
- Unwelcome physical conduct such as pinching and/or unnecessary touching.

The Employment Equality Act 1998 prohibits harassment by reference to particular characteristics flowing from race, religion, age, gender, marital status, family status, sexual orientation or membership of the travelling community.

Harassment can include conduct offensive to a reasonable person, e.g. oral or written slurs, physical contact, gestures, jokes, displaying pictures, flags/emblems, graffiti or other material which state/imply prejudicial attitudes which are offensive to fellow employees.

10.2 Complaints Procedure

There is both an informal and formal procedure to deal with the issue of bullying, harassment or other serious misconduct whilst on board the vessel.

10.2.1 Informal Procedure

Where appropriate the informal route may be explored first to save discomfort for all parties involved, however all claims or allegations of harassment, sexual harassment or misconduct are treated seriously and dealt with sensitively, confidentially and transparently for those closely involved. Thus, in the first instance a vessel user who believes they are the subject of harassment should ask the person responsible to stop the offensive behaviour. When this action does not result in the cessation of the harassment or bullying, or when matters cannot be resolved locally, the vessel user should use the formal procedure. It is recognised that it may not always be practicable to use the informal procedure, particularly where the harassment is of a particularly serious nature or where the people involved are at different levels in the organisation. In such instances, vessel users should use the formal mechanism.

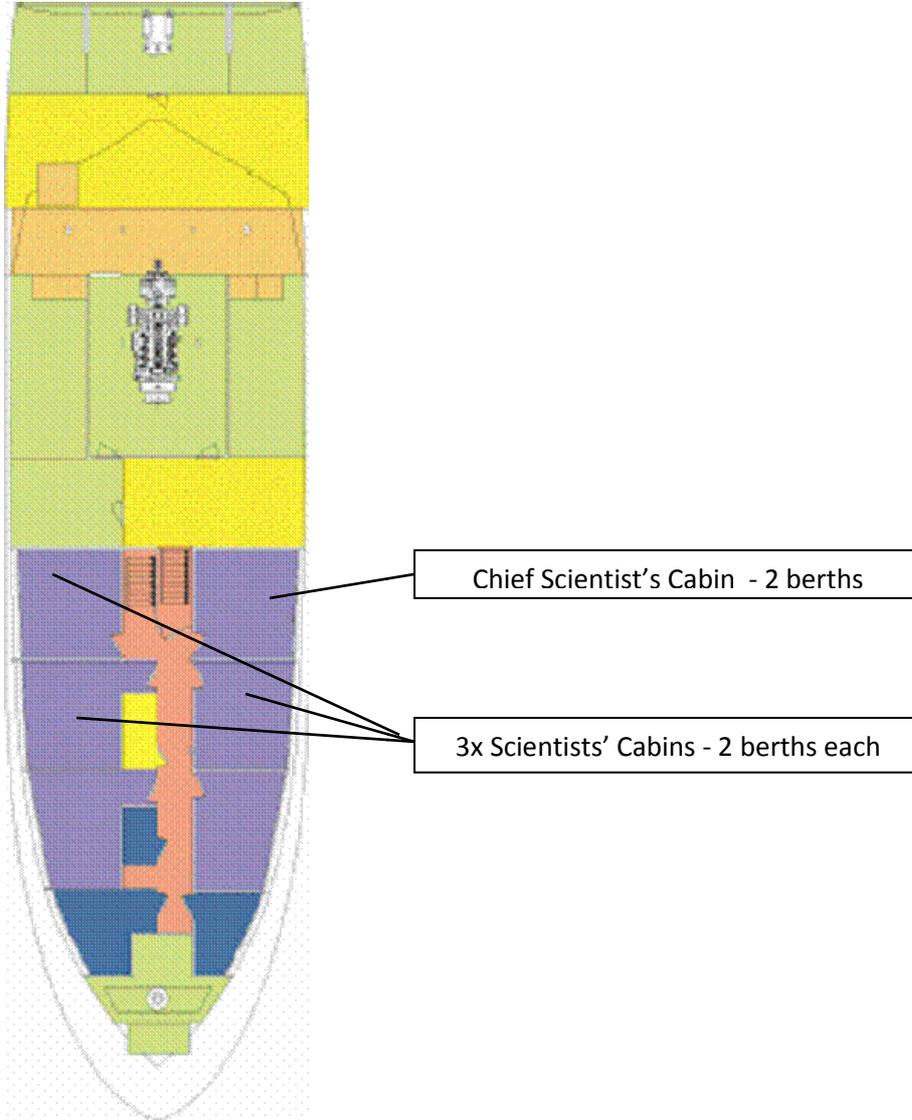
10.2.2 Formal Procedure

Where a formal complaint is necessary, the vessel user should contact the Chief Scientist as soon as possible. If this is inappropriate, then the employee should contact the Master of the Vessel. **The Chief Scientist is obliged to inform RV Operations and the Master of the Vessel on receiving any formal complaint.** The person making the complaint may be required to put their allegation in writing. All complaints received will be treated seriously, confidentially and dealt with as soon as is practicable. However, as the vessels operate at sea, all complaints will be dealt with in full when the vessel returns to port. In the interests of natural justice, the alleged harasser will be made aware of the nature of the complaint, his/her right to representation, and will be given every opportunity to rebut the allegations made. When the investigation has been completed, both parties will be informed as to whether or not the complaint has been upheld.

Where a complaint is upheld, any vessel user found to violate this policy may not be permitted to participate in future surveys on board Marine Institute vessels. This decision will be made at the discretion of the Marine Institute. For Marine Institute staff a formal disciplinary hearing may take place and the disciplinary action to be taken will be in line with the Institute's disciplinary procedure. In the case of P&O Maritime Services Ltd staff a formal disciplinary hearing may take place and the disciplinary action to be taken will be in line with the P&O Maritime Services Ltd disciplinary procedure. For external users of the vessel who are found to be in breach of this policy the matter will be referred to their senior management.

APPENDIX I – BERTHING PLAN – CELTIC VOYAGER

Below Main Deck



APPENDIX II – VESSEL COMMUNICATIONS, IT & INSTRUMENTATION BRIEFING

Communications

The general Marine Institute I.T. policy above applies to all vessel users with the following specific rules applying to the R.V. *Celtic Voyager*.

The R.V. *Celtic Voyager* is predominantly an in-shore vessel. The vessel makes many more port calls than the R.V. *Celtic Explorer* and is regularly in GSM mobile range.

1. Data Communications

The main email address set up for the R.V. *Celtic Voyager* - celticvoyager@pomaritime.ie

The Admin PC in the wheelhouse is set up for email and Internet access. This is the only PC with access to Fleet33 should the VSAT be offline. Officers have the right to check content of all outgoing and incoming email on this PC. They will be randomly monitored.

The CTD PC in dry lab is setup for Internet access for scientists. Internet browsing and webmail as per the IT policy apply.

There are three Data Connection options on the R.V. *Celtic Voyager* :

1. 3G on both phone and modem dongle.
2. VSAT always on satellite service. [Note: This is usually run for 9 months of the year]
3. Fleet 33 dial up pay as you go satellite based service.

Speed Vs Cost:

The 3G service is the fastest. It is on a flat rate which also includes roaming in UK and so does not incur extra cost (Roaming outside Irish\UK waters is blocked). So 3G should be used whenever possible. The VSAT service is on a flat monthly rate so usage is unlimited. An automated switching device is installed so it should pick the fastest connection available.

The Fleet33 service is charged by usage so each connection session incurs a cost. When the vessel is out of 3G range and the VSAT is not in service the Fleet 33 system can be used. In order to keep costs down communications must be tightly controlled therefore the following rules must be complied with:

- All sessions on Fleet 33 must be logged and signed for. A sample log sheet is provided below.
- Sessions should be limited to 2 to 3 times a day. Emails should not be sent ad-hoc during the day unless there is an urgent business need. If someone wants to send an email it must be created and placed in the email systems outbox.
- Officers only should send emails. They must check the emails to be sent in the outbox and ensure they are within the recommended size.
- Nowcasting sessions should be limited to 2 per day unless there is an urgent business need.
- All attachments must be zipped.
- Email sizes should be no more than about 100Kbytes.
- The size of incoming email must also be checked and, if possible, the size limit will be programmed into the system. If this cannot be done the officer must check the inbox on web mail first and remove any mails exceeding 150Kbytes and advise the originator. Exceptions must be requested and granted by the officer on watch and the size/originator noted in the log sheet comment section.

- E-mail files to R.V. *Celtic Voyager* should not exceed 100Kbytes. If there is a business need to send larger files RV Operations or P&O Maritime Services Ltd should be notified and the R.V. *Celtic Voyager* should be advised to expect the larger file.

2. Personal Email and Internet Access

As email and Internet access for personal purposes can result in extra cost it is strictly forbidden using the Fleet33 service. When the 3G\VSAT service is available personal email and Internet access is allowed.

3. Voice Communication

There are three voice communications aboard the R.V. *Celtic Voyager*.

- a) VOIP provided via VSAT Service (Similar cost to landline).
- b) 2 GSM Mobile phones (Standard mobile charges apply).
- c) Fleet33 satellite service (Very expensive so limited to business purposes).

All voice calls from the vessel must be made by VOIP or GSM phone when in range. If the GSM service is not available the Fleet33 service may be used if the VOIP is not functioning. All Fleet33 phone calls must be logged (see sample log below).

Personal calls on the Fleet33 or GSM are strictly forbidden except in the case of an emergency. As the VOIP service is reasonably cheap when calling landlines reasonable personal calls are allowed. (under 10mins). If it's not possible to call a land line please request the mobile user you are calling to call back on the VOIP number. Mobiles are significantly more expensive to call.

R.V Celtic Voyager Data Comms / Call Log

Date	Time	Service (Voice/Data)	Number / Site	Call Duration	Amount of Data	Signature	Comment

4. Vessel Instrumentation

Underway Instrumentation

Thermosalinograph	Fluorometer
Batos Weather Station	SCS Data Display System
SCS Data Acquisition System	SCS Event Logger System

Survey / Specific Instrumentation

CTD and Water Sampling Rosette	GAPS USBL
ADCP	Colour Video Echo Sounder 50KHz
Multibeam Echosounder	Hydrographic Echosounder
Sub-bottom Profiler	Sound Velocity Probe

PC Network

There is a PC network available on Celtic Voyager for the purposes of capturing, processing and storing scientific data. An instrument support technician can be requested and will be available to provide a briefing on this prior to sailing. The technician can also brief scientists on the operation of

available ships scientific equipment such as CTD, ADCP and SVP prior to, or when underway. It should be noted that the presence of a technician aboard the ship reduces the scientific complement by one person.

Marine Data Management

Underway data is collected and logged to the SCS Underway System. This data is also presented on screens in various locations on the vessel SCS Data Display System. The presentation of the data can be changed to suit purpose (graphical vs. numerical).

The ship's instrumentation technician normally checks underway data to ensure it is being collected. As sometimes there is no instrument technician on board, scientists are encouraged to check occasionally to see that data is being collected and report any problems noted with data. Problems should be reported to the ships officers. The officers can then report the issues to shore based support.

SCS data can be extracted written to file using the Event Logger program as per procedure.

Most PC's have CD\DVD burners. Scientists must provide their own blank disks.

Access to servers and SCS workstations is normally forbidden. The CTD PC and SCS Data Display PC are available for data access and backup. Usernames and passwords are available from technicians and ship's officers.

R.V. Celtic Voyager - Vessel Computing – Vessel User Checklist

The R.V. *Celtic Voyager* computing environment consists of a Modern Windows 2003 Domain with network, file, print and data acquisition services, connected via a 10/100/1000MB, switched network. A standard set of surface underway parameters are logged by the vessel. The primary role of the IT systems is that of data acquisition and storage. General computing PCs are also available.

The ships technician should be informed of any systems brought on board by vessel users that are to be connected to the vessels network. Any system brought on board should be:

- Patched to the latest Operating System and security patches.
- Should be running an anti-virus package, with the most current anti-virus definitions.

Any software or media brought on board should also be scanned for viruses.

The vessel technician will scan the system for viruses. If the system is to be connected to the network it should have a fully functioning network card. The technician will assign a network port for the system and will ensure that it is automatically configured to participate in the vessel network.

Data Acquisition/Storage

The SCS system logs surface underway data, storing a standard suite of parameters in a SQL server database. Access to this database is via SCS Event Logger Application (**SOP Available Upon Request**). The SCS Data Visualisation system provides a near real time representation of current Surface Underway data being logged to the SCS system (see appendix 2).

Scientists should ensure that any data logged by standalone systems during the survey is copied regularly to an appropriately named network file share(s) on the file server \\VOYAGERFS01. The ship technician should be informed of any additional data types that are logged during survey. The

technician will create an appropriately named file share for this data on the server. The [\\VOYAGERFS01](#) has redundant drives so it is advisable to use this server as your primary storage location. By all means make a copy to a portable drive as a deliverable at the end of the survey.

The Network file shares on \\VOYAGERFS01 will be visible to users through the Windows network neighbourhood e.g. The AMS folder is reserved for the Marine Institute AMS department which is largely used for the Infomar project.

Ship Data folder should be used for general scientific surveys. It is recommended that the user creates a folder with the Survey Cruise code i.e. CV14004. If a Technician is onboard they can setup the folder for you.

Ship Docs is reserved for vessel documentation. Access is restricted for most users. Some folders may have read access.

DATA TYPE	STORAGE LOCATION
AMS	\\VOYAGERFS01\AMS
Ship_Data	\\VOYAGERFS01\Ship_Data
Ship_Docs	\\VOYAGERFS01\Ship_Docs

Data Backup

Every night, during the survey, the SCS data acquisition database is backed up on the SCS servers. LTO Drive 1 is used for backup of ships documentation and underway data.

LTO Drive 2 is available for backup of scientific data. If you require this option you should request the service at pre-cruise as a technician will have to configure the backup job to run. Backup to portable RAID systems or DVD are more commonly used for survey data. It is the responsibility of the scientists/vessel users to copy survey data to these shares regularly, on a daily basis. If automated routines are in place for copying data to the shares, it is the scientist's responsibility to regularly check that the files have transferred successfully. Individual desktop PC's will not be part of the nightly backup routines.

Consumables/Printing

There is a multi-function inkjet printer in the wheelhouse and dry lab. Vessel users should ensure that there are adequate quantities of printer consumables (print cartridges, paper) available for the duration of the survey. If they choose to use the LTO backup service they should also bring adequate LTO4 tapes.

Acceptable Use

Vessel users:

- Should not interfere with and/or change system hardware/software configurations on any vessel system without the permission of the ship's technician.
- Should not install software without prior clearance from the ship's technician.
- Any software installed that is not part of the vessels regular software suite should be uninstalled at the end of the survey.

SCS Client Application

The SCS Client Application has been installed on [\\CTD2013](#) PC. Several features such as Plots, Fixed displays, Event Logging and Maps can be utilised using this application. For details please request the SCS manual. SOP's are available for loading pre-programmed plots, fixed displays and Event Logging.

SCS Underway Data Visualization Utility

A dedicated PC [\\SCSDATAVIZ](#) has been installed in the rack system dry lab on the fwd. port side in the corner. This PC has been supplied purely for the purpose of supporting vessel users in visualizing data as it is being collected. There are various functions with the system that may assist users and technicians working with and managing the system as a whole, and the system is accessed through the main rack KVM switch (see the duty technician). There are repeater screens in the wet (*2) and dry labs.

NB

Detailed requirements can be easily dealt with but must be discussed at the pre-cruise stage.

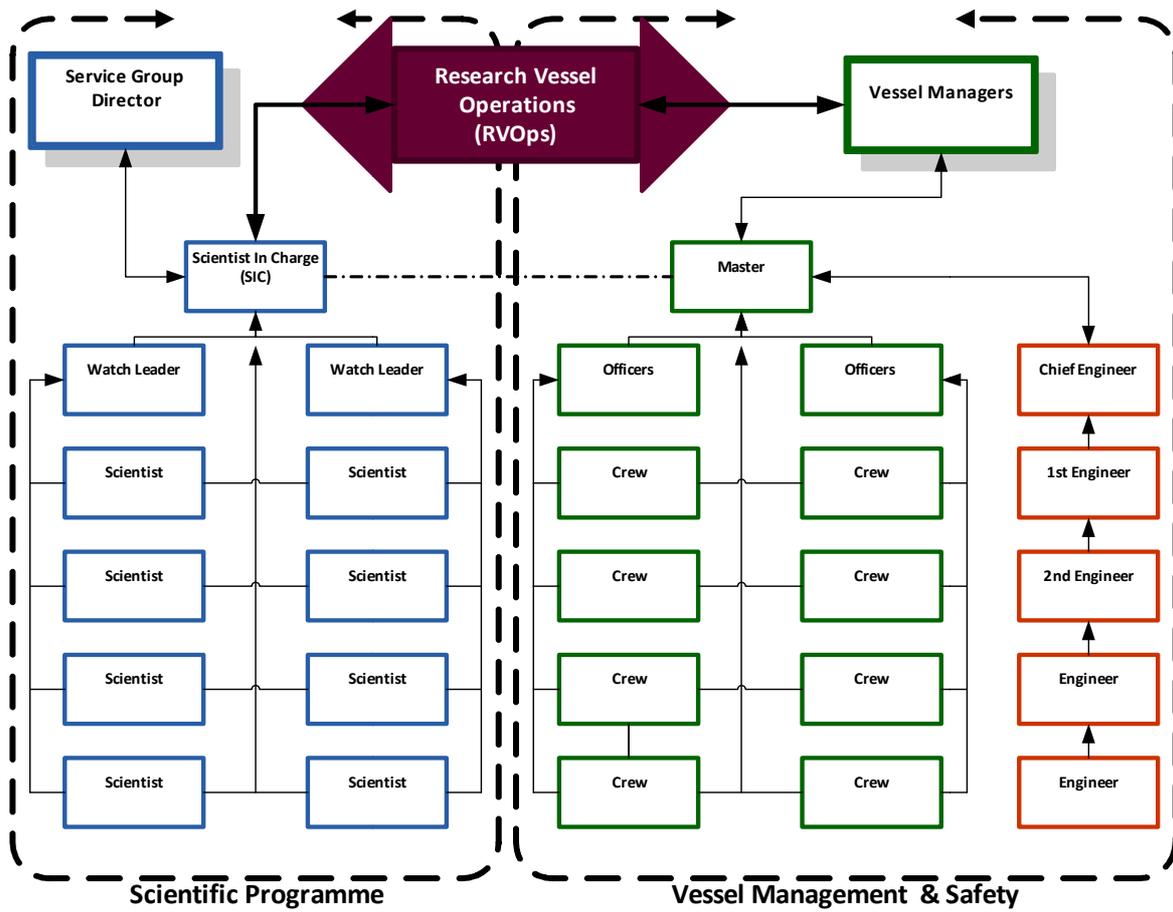
Manuals for both systems can be found on board. The SCS and its peripheral applications are ALWAYS ON systems. If there are any issues with the systems please get in touch with the duty technician in the first instance and/or RV Operations for follow up. We would welcome suggestions as to how the systems could be improved.

PLEASE NOTE

All servers and workstations/PCs are connected to a Windows 2003 network. If a Marine Institute scientist wants to connect a PC/laptop to the ships network notice must be given during the pre survey meeting and the computer verified as having up-to-date virus protection. It is forbidden to connect external PCs/laptops to the ships network without notifying the ships technician or vessel officers.

APPENDIX III – COMMUNICATION STRUCTURE

The below diagram shows the communication structure when conducting scientific surveys at sea on Marine Institute research vessels.



APPENDIX IV – CONTACT DETAILS

MARINE INSTITUTE	+ 353 91 387200
RESEARCH VESSEL OPERATIONS	
Aodhan Fitzgerald Direct Dial Mobile Email	+ 353 91 387470 + 353 86 2488765 afitzgerald@marine.ie
Bernadette Ni Chonghaile Direct Dial Email	+ 353 91 387507 Bernadette.nichonghaile@marine.ie
VESSEL	
Celtic Voyager Email	celticvoyager@pomaritime.ie
Celtic Voyager Fleet 33 Voice Numbers	00870 -764687325 / 764687326
Celtic Voyager GSM Voice	+353 87 9186786 / +353 87 7988588
Celtic Voyager GSM Fax	+353 87 2016046
Celtic Voyager Mini M Voice	00870 763066755
Celtic Voyager VOIP Number	+353 91 423 396

APPENDIX V – DRUG & ALCOHOL GUIDELINES

Drugs and Alcohol Testing Guidelines for Marine Institute staff working on board Marine Institute Research Vessels

The Safety, Health & Welfare at Work Act 2005 obliges certain employees to submit to appropriate and reasonable tests for intoxicants. The Marine Institute policy will only apply to safety critical situations. All members of staff who carry out work on board the Marine Institute Research Vessels – the *Celtic Explorer* and the *Celtic Voyager* will therefore come under the scope of this policy.

The Safety, Health & Welfare at Work Act 2005

The Safety, Health & Welfare at Work Act 2005 provides important definitions and general obligations on employers and employees and those pertinent to this policy are outlined below:

- Intoxicant includes alcohol and drugs and any combination of drugs and/or alcohol. The Act does not distinguish between legal or illegal drugs.
- An employee shall while at work ensure that he/she is not under the influence of an intoxicant to the extent where he/she may be in such a state as to endanger his/her own safety, health or welfare at work or that of any other person.
- An employee must not engage in improper conduct or other behaviour that is likely to endanger his/her own safety, health or welfare at work or that of any other person.
- An employee if reasonably required by his/her employer must submit to appropriate, reasonable and proportionate test for intoxicants.

Key Points

This policy will apply to all staff of the Marine Institute either directly employed or contracted to carry out work on behalf of the Marine Institute on board the MI Research Vessels.

Intoxicant testing will be carried out for ‘*with cause*’ and ‘*post-accident*’ testing purposes only. This means where/whenever a person appears to be under the influence of an intoxicant or when a person is involved in an accident or injured and the circumstances suggest that intoxicants may be involved. Reasonable cause may include but is not limited to the following:

- Evidence of drugs or alcohol about the person (blood shot eyes, hand tremor, incoherence, slurred speech, swaying or difficulty in walking).
- Observed taking of intoxicants.
- Unusual conduct that suggests impairment or influence of intoxicants.
- Poor performance patterns.
- Unexplained absences or sluggishness/lethargy.
- On the job accident or incident where the circumstances suggest the influence of intoxicants.

In all cases, where the use of intoxicants are suspected, the decision whether to invoke the ‘*with cause*’ or ‘*post-accident*’ testing procedure will be made by the Master after consultation with the Chief Scientist. If the Chief Scientist is suspected of being under the influence of an intoxicant, then the decision about testing will be taken by the Master after consultation with the First Officer.

Testing Procedures

In the event that testing is required, P&O Maritime Services Ltd will use an on board kit comprising of 'chain of custody' collection cups and forms. A calibrated breathalyser will be used for alcohol testing.

P&O Maritime Services Ltd named and trained staff will be responsible for the collection of samples. These samples will be securely stored refrigerated and then dispatched to the accredited laboratory for analysis as soon as feasible for priority analysis. Results will be reported by email as soon as available (usually on the same day as receipt).

Consent Procedures

All persons directly employed or contracted to carry out work on behalf of the MI on board the MI Research Vessels will be requested to sign a consent form prior to sailing.

Positive Test Results

In the event of a positive result, the person will be required to remain in their cabin until arrangements are in place to enable the person to disembark. Following disembarkation a meeting will take place at the earliest opportunity between the person, their line manager, the Chief Scientist, and the Human Resource Manager where appropriate action will be taken. This may include referral for a confidential, professional assessment and referral for resolving or accessing treatment for addiction or dependence, access to the company nominated Medical Practitioner / Employee Assistance Programme and or measures under the Marine Institute Disciplinary Procedures. At all times the company will treat in confidence and with sensitivity all cases where employees experience difficulties associated with the use of intoxicants.