

**Megger.**

# **FREJA 300** **Relay Test System**

**FREJA 300**  
Relay Test System



- **Manual and PC remote control**
- **Easy to use**
- **Excellent software provides great visuals and simple setup**
- **Lightweight and portable**
- **User can calibrate the unit**

## **Description**

The FREJA<sup>TM</sup>300 relay testing system is a computer-aided relay testing and simulation system. The weight of FREJA 300 is only 15 kg. The rugged hardware design is built for field use over a wide temperature range, with the possibilities of intelligent software to perform rapid testing.

FREJA 300 can be operated with or without a PC. After being put into the Local mode, FREJA 300 can be used stand-alone without a PC. Using the Local mode is easy. The function of each key is described on the display, which also presents the settings and measured values.

The very accurate (typically 0.01%) low level analogue inputs are designed for transducer measurements. The high level inputs can be used in a normal volt- and ammeter. FREJA 300 can generate 4x150 V (82 VA) and 3x15 A (87 VA) or 1x45 A (250 VA). Each output can be varied independently. Both static and dynamic testing can be performed, such as pre-fault and fault generation, simultaneous ramping of several quantities and wave form editing.

FREJA 300 can also be used as a fault simulator to create proper relay configuration for specific applications. This is possible by importing and re-generating transient disturbance files often referred to as COMTRADE files. These files may include calculated digital records created by power network simulator software's such as EMTP, RTDS or data records from actual fault events.

With use of the GPS receiver accessory, GPS200 – MGTR, several FREJA 300 can be synchronized to perform end-to-end testing with the test sets allocated in different substations.

A FREJA 300 can be upgraded to a FREJA 306.

## **Application**

FREJA 300 is intended primarily for secondary testing of protection relays. Virtually all types of protection relays can be tested.

| <b>Examples of what FREJA 300 can test</b>             | <b>ANSI® No.</b> |
|--------------------------------------------------------|------------------|
| Distance protection relay                              | 21               |
| Synchronising or synchronism-check relays              | 25               |
| Undervoltage relays                                    | 27               |
| Directional Power relays                               | 32               |
| Undercurrent or underpower relays                      | 37               |
| Negative sequence overcurrent relays                   | 46               |
| Overcurrent- <i>I</i> ground fault relays              | 50               |
| Inverse time overcurrent- <i>I</i> ground fault relays | 51               |
| Power factor relays                                    | 55               |
| Overvoltage relays                                     | 59               |
| Voltage or current balance relays                      | 60               |
| Directional overcurrent relays                         | 67               |
| DC overcurrent relays                                  | 76               |
| Phase-angle measuring or out-of-step protection relays | 78               |
| Automatic reclosing devices                            | 79               |
| Frequency relays                                       | 81               |
| Differential protection relays                         | 87               |
| Directional voltage relays                             | 91               |
| Voltage and power directional relays                   | 92               |

# Freja 300 Test Manual

**RJ Alexander**



## **Freja 300 Test Manual:**

Yeah, reviewing a book **Freja 300 Test Manual** could be credited with your near connections listings. This is just one of the solutions for you to be successful. As understood, realization does not suggest that you have fabulous points.

Comprehending as without difficulty as covenant even more than new will allow each success. bordering to, the notice as competently as insight of this Freja 300 Test Manual can be taken as skillfully as picked to act.

<https://staging.conocer.cide.edu/files/publication/index.jsp/Japanese%20Corporate%20Activities%20In%20Asia%20Implications%20For%20Us%20japan%20Relations.pdf>

## **Table of Contents Freja 300 Test Manual**

1. Understanding the eBook Freja 300 Test Manual
  - The Rise of Digital Reading Freja 300 Test Manual
  - Advantages of eBooks Over Traditional Books
2. Identifying Freja 300 Test Manual
  - Exploring Different Genres
  - Considering Fiction vs. Non-Fiction
  - Determining Your Reading Goals
3. Choosing the Right eBook Platform
  - Popular eBook Platforms
  - Features to Look for in an Freja 300 Test Manual
  - User-Friendly Interface
4. Exploring eBook Recommendations from Freja 300 Test Manual
  - Personalized Recommendations
  - Freja 300 Test Manual User Reviews and Ratings
  - Freja 300 Test Manual and Bestseller Lists
5. Accessing Freja 300 Test Manual Free and Paid eBooks
  - Freja 300 Test Manual Public Domain eBooks

- Freja 300 Test Manual eBook Subscription Services
- Freja 300 Test Manual Budget-Friendly Options
- 6. Navigating Freja 300 Test Manual eBook Formats
  - ePub, PDF, MOBI, and More
  - Freja 300 Test Manual Compatibility with Devices
  - Freja 300 Test Manual Enhanced eBook Features
- 7. Enhancing Your Reading Experience
  - Adjustable Fonts and Text Sizes of Freja 300 Test Manual
  - Highlighting and Note-Taking Freja 300 Test Manual
  - Interactive Elements Freja 300 Test Manual
- 8. Staying Engaged with Freja 300 Test Manual
  - Joining Online Reading Communities
  - Participating in Virtual Book Clubs
  - Following Authors and Publishers Freja 300 Test Manual
- 9. Balancing eBooks and Physical Books Freja 300 Test Manual
  - Benefits of a Digital Library
  - Creating a Diverse Reading Collection Freja 300 Test Manual
- 10. Overcoming Reading Challenges
  - Dealing with Digital Eye Strain
  - Minimizing Distractions
  - Managing Screen Time
- 11. Cultivating a Reading Routine Freja 300 Test Manual
  - Setting Reading Goals Freja 300 Test Manual
  - Carving Out Dedicated Reading Time
- 12. Sourcing Reliable Information of Freja 300 Test Manual
  - Fact-Checking eBook Content of Freja 300 Test Manual
  - Distinguishing Credible Sources
- 13. Promoting Lifelong Learning
  - Utilizing eBooks for Skill Development
  - Exploring Educational eBooks

## 14. Embracing eBook Trends

- Integration of Multimedia Elements
- Interactive and Gamified eBooks

### **Freja 300 Test Manual Introduction**

In the digital age, access to information has become easier than ever before. The ability to download Freja 300 Test Manual has revolutionized the way we consume written content. Whether you are a student looking for course material, an avid reader searching for your next favorite book, or a professional seeking research papers, the option to download Freja 300 Test Manual has opened up a world of possibilities. Downloading Freja 300 Test Manual provides numerous advantages over physical copies of books and documents. Firstly, it is incredibly convenient. Gone are the days of carrying around heavy textbooks or bulky folders filled with papers. With the click of a button, you can gain immediate access to valuable resources on any device. This convenience allows for efficient studying, researching, and reading on the go. Moreover, the cost-effective nature of downloading Freja 300 Test Manual has democratized knowledge. Traditional books and academic journals can be expensive, making it difficult for individuals with limited financial resources to access information. By offering free PDF downloads, publishers and authors are enabling a wider audience to benefit from their work. This inclusivity promotes equal opportunities for learning and personal growth. There are numerous websites and platforms where individuals can download Freja 300 Test Manual. These websites range from academic databases offering research papers and journals to online libraries with an expansive collection of books from various genres. Many authors and publishers also upload their work to specific websites, granting readers access to their content without any charge. These platforms not only provide access to existing literature but also serve as an excellent platform for undiscovered authors to share their work with the world. However, it is essential to be cautious while downloading Freja 300 Test Manual. Some websites may offer pirated or illegally obtained copies of copyrighted material. Engaging in such activities not only violates copyright laws but also undermines the efforts of authors, publishers, and researchers. To ensure ethical downloading, it is advisable to utilize reputable websites that prioritize the legal distribution of content. When downloading Freja 300 Test Manual, users should also consider the potential security risks associated with online platforms. Malicious actors may exploit vulnerabilities in unprotected websites to distribute malware or steal personal information. To protect themselves, individuals should ensure their devices have reliable antivirus software installed and validate the legitimacy of the websites they are downloading from. In conclusion, the ability to download Freja 300 Test Manual has transformed the way we access information. With the convenience, cost-effectiveness, and accessibility it offers, free PDF downloads have become a popular choice for students, researchers, and book lovers worldwide. However, it is crucial to engage in ethical downloading

practices and prioritize personal security when utilizing online platforms. By doing so, individuals can make the most of the vast array of free PDF resources available and embark on a journey of continuous learning and intellectual growth.

### **FAQs About Freja 300 Test Manual Books**

How do I know which eBook platform is the best for me? Finding the best eBook platform depends on your reading preferences and device compatibility. Research different platforms, read user reviews, and explore their features before making a choice. Are free eBooks of good quality? Yes, many reputable platforms offer high-quality free eBooks, including classics and public domain works. However, make sure to verify the source to ensure the eBook credibility. Can I read eBooks without an eReader? Absolutely! Most eBook platforms offer web-based readers or mobile apps that allow you to read eBooks on your computer, tablet, or smartphone. How do I avoid digital eye strain while reading eBooks? To prevent digital eye strain, take regular breaks, adjust the font size and background color, and ensure proper lighting while reading eBooks. What the advantage of interactive eBooks? Interactive eBooks incorporate multimedia elements, quizzes, and activities, enhancing the reader engagement and providing a more immersive learning experience. Freja 300 Test Manual is one of the best book in our library for free trial. We provide copy of Freja 300 Test Manual in digital format, so the resources that you find are reliable. There are also many Ebooks of related with Freja 300 Test Manual. Where to download Freja 300 Test Manual online for free? Are you looking for Freja 300 Test Manual PDF? This is definitely going to save you time and cash in something you should think about.

### **Find Freja 300 Test Manual :**

*japanese corporate activities in asia implications for u.s.-japan relations*

japanese colleges and universities 1989 a guide to institutions of higher education in japan

*japanese temples sculpture paintings gar*

*japan a country study area handbook series ; da pam 550-30*

*japanese cook*

jasper whites cooking from new england more than 300 traditional contemporary recipes

*japanese war crimes*

**jane and michael sterns encyclopedia of pop culture**

*janes airport equipment 1988-89*

**japan at your feet a hiking walking guide**

~~james stirling die neue staatsgalerie stuttgart~~

~~japanese soviet russian relations since 1945 difficult peace~~

~~james taylors shocked amazed~~

janes world aircraft recogniti

jasons story

**Freja 300 Test Manual :**

**nutshells legal general legalbooks ie** - Mar 30 2022

web family law nutshell 25 the irish legal system nutshell donova 25 tort 3rd edition cases in a nutshell 25 practical probate 55 employment law nutshells 3rd ed

the law of evidence in a nutshell pdf burden of proof law - Apr 11 2023

web the law of evidence in a nutshell free download as pdf file pdf text file txt or read online for free dr peter fritz walter is an international lawyer and legal researcher from germany specialized on the law of evidence as applied in american district courts in cases that involve the claim of foreign sovereign immunity

nutshells study aids libguides at mitchell hamline school of law - Jan 28 2022

web aug 28 2023 about nutshells nutshells are compact guides that provide a succinct yet thorough overview of a particular area of the law with an emphasis on key cases and statutes the most recent editions of the nutshells are available online as part of the west academic study aids collection

**basics of law of evidence in a nutshell ipleaders blog** - Nov 06 2022

web jun 27 2019 introduction the law of evidence is a significant part of any branch of the judicial system irrespective of any nation which means the role of evidence is very important statute in every country

*canadian evidence law in a nutshell 3rd edition softbound book* - Jun 01 2022

web dec 30 2009 canadian evidence law in a nutshell 3rd edition softbound book author lisa dufraimont availability in stock canadian evidence law in a nutshell third edition provides a succinct introduction to the legal and practical aspects of the law of evidence in

evidence law wikipedia - Jan 08 2023

web the law of evidence also known as the rules of evidence encompasses the rules and legal principles that govern the proof of facts in a legal proceeding these rules determine what evidence must or must not be considered by the trier of fact in reaching its decision

*canadian evidence law in a nutshell by lisa dufraimont* - Sep 04 2022

web canadian evidence law in a nutshell 3rd edition provides a succinct introduction to the legal and practical aspects of the law of evidence in canada professors delisle and dufraimont articulate the principles underlying each of the rules of evidence bringing clarity to this fascinating and continually evolving area of law

**evidence definition law types examples facts britannica** - Dec 07 2022

web evidence in law any of the material items or assertions of fact that may be submitted to a competent tribunal as a means of ascertaining the truth of any alleged matter of fact under investigation before it to the end that court decisions are to be based on truth founded on evidence a primary duty of courts is to conduct proper proceedings

*evidence in a nutshell 5th ed nutshell series amazon com* - May 12 2023

web aug 1 2007 federal rules of evidence are the anchor of this single volume nutshell the text summarizes significant u s supreme court decisions additional leading cases and principal schools of evidentiary thought

**canadian evidence law in a nutshell google books** - Feb 26 2022

web canadian evidence law in a nutshell 3rd edition provides a succinct introduction to the legal and practical aspects of the law of evidence in canada professors delisle and dufraimont

evidence law nutshell 5th edition by robert wilson booktopia - Mar 10 2023

web jun 20 2018 1 general outline of the laws of evidence 2 evidence and the fact finding process 3 degrees and burdens of proof 4 the credibility of evidence and character evidence 5 similar fact evidence 6 the accused as a witness in criminal proceedings 7 the rule against hearsay evidence 8 opinion evidence 9

*round hall nutshells evidence ucc shop* - Aug 03 2022

web by ross gorman thomson round hall s nutshell on evidence law is a revision tool for students summarising the essential components of the vast subject of evidence law it is a user friendly accurate and concise work that will be an invaluable study aid outlining the main principles and major cases in the following areas

**evidence in a nutshell nutshells 6th edition amazon com** - Apr 30 2022

web dec 8 2011 evidence in a nutshell nutshells 58 00 1 only 10 left in stock more on the way the newest restyled version of the federal rules of evidence reproduced in the appendix are the anchor of this single volume nutshell with some state variations noted where important

**research guides secondary sources nutshells law** - Jul 02 2022

web aug 18 2023 nutshells are non scholarly summaries of the law they are small paperbacks written on a specific topic such as torts in a very approachable way the easy to read nature of these books makes them a good choice if you are researching a

**nutshell evidence law fifth edition book paperback** - Feb 09 2023

web nutshell evidence law fifth edition book paperback 20 june 2018 the essence of the law lawbook co nutshells are the essential revision tool they provide a concise outline of the principles for each of the major subject areas within undergraduate law

nutshell evidence law nutshells amazon com tr - Jun 13 2023

web nutshell evidence law nutshells michael stockdale adam jackson amazon com tr kitap

nutshell evidence law fifth edition thomson reuters australia - Aug 15 2023

web general outline of the laws of evidence evidence and the fact finding process degrees and burdens of proof the credibility of evidence and character evidence similar fact evidence the accused as a witness in criminal proceedings the rule against hearsay evidence opinion evidence the doctrine of res gestae

study aids collection book west academic - Dec 27 2021

web description the nutshell reflecting the federal rules of evidence as restyled and amended up to and including december 1 2020 contains a crisp clear concise and complete explanation of each federal rule of evidence designed to prepare every student for the course final the multistate bar examination and most significantly a successful

**evidence nutshell legal general legalbooks ie** - Oct 05 2022

web publication date 01 03 2006 isbn 9781858004211 jurisdiction ireland thomson round hall s nutshell on evidence law is a revision tool for students summarising the essential components of the vast subject of evidence law it is a user friendly accurate and concise work that will be an invaluable study aid outlining the main principles

**nutshell evidence law nutshells amazon co uk** - Jul 14 2023

web apr 26 2011 buy nutshell evidence law nutshells 6th revised edition by michael stockdale adam jackson isbn 9780414045934 from amazon s book store everyday low prices and free delivery on eligible orders

t3 ribbon forex day trading strategy dolphintrader com - Aug 02 2023

web strategy trading rules buy conditions kino ribbon indicator changes from red to green color bullish trend macd indicator turns back above 0 00 from below and kino ribbon must be green colored open long trade position place your stop loss below the green colored t3 ribbon indicator line

cynthias color ribbon surfing system free download forex - Jan 27 2023

web articles tagged with cynthias color ribbon surfing system free download at forex evolution

download the ribbon trend technical indicator for metatrader - Apr 17 2022

web aug 17 2022 ribbon trend this indicator is a simple tool to spot a possible trend when the ribbon below the price bars it will turn to green color and the trend is seen to be bullish when the ribbon above the price bars it will

**ribbon trading system free download** - May 19 2022

web download free ribbon trading system it can be applied to any trading instrument including stocks forex commodities and futures in this article we will explore the ribbon trading system in detail including its applications and tips for using it effectively in your trading strategy

ribbon color surfing download mt4 indicator forex winning - Feb 25 2023

web forex color ribbon surfing system free download april 14 2016 written by forex trader simply had to claim i want the brand new dealing process with forex color ribbon surfing system produced across 300 pips for it yesterday evening and this also day together with achieved it easily

cynthias color ribbon surfing system review forex best - Jul 01 2023

web nov 1 2014 cynthias color ribbon surfing system review november 1 2014 written by forex trader i ve obtained a contact advertising this particular cynthia s color ribbon surfing system that states it created seventy five pips throughout the 3 main information bulletins as well as the talk through draghi from the ecb and so i had been

**moving average ribbon tradingview** - Nov 24 2022

web definition moving average ribbon is an indicator that displays up to four moving averages on your chart moving averages of varying lengths can be used to compare long term and short term trends and attempt to predict possible chart movements based on its past performance inputs

**ribbon forex system forex strategies forex resources forex** - Jul 21 2022

web ribbon forex system ribbon forex system forex strategies forex resources forex trading free forex trading signals and fx forecast free forex strategies forex indicators forex resources and free forex forecast

**forex color ribbon pdf cyberlab sutd edu sg** - Dec 26 2022

web two double sided satin ribbons 8 color maps tables for weights measurements and currency packaged in an attractive 2 piece box printed and bound in korea coins currency of the middle east apr 20 2022

**forex icons symbols flaticon** - Sep 03 2023

web 1 110 forex icons vector icons in svg psd png eps and icon font use the paint collection feature and change the color of the whole collection or do it icon by icon download icon font or svg download your collections in

**mongoose forex system color ribbon based indicator** - Oct 04 2023

web mongoose forex system profits with pleasure a profitable forex system its time to bring back pleasure to forex trading this forex system is so easy to incorporate into your daily trading you might just drop everything else this is to all forex traders new experienced or even non traders

cynthia s color ribbon surfing system forex auto scaler youtube - Jun 19 2022

web nutsforforex 599 subscribers subscribe like share 1 7k views 7 years ago cynthia forex daytradeforex cynthia s color ribbon surfing system learn more here

*forex color ribbon assets ceu social* - Mar 17 2022

web forex color ribbon forex color ribbon 2 downloaded from assets ceu social on 2020 08 10 by guest pure technical analysis and fundamental analysis just do not work sending out contradictory messages these opposing schools of thought leave investors baffled about the future direction of the market and consequently at a loss as to how to

*colour change ma forex factory* - Oct 24 2022

web dec 9 2020 4 10am kostas1 i have been using the following simple and easy for years attached file s ma in color mq4 4 kb 972 downloads

**color ribbon surfing system forex vs power** - Mar 29 2023

web feb 3 2021 color ribbon surfing system figure out how to waves that color phenomena ocean using perilous consistency concerning vital stage marks as i scrunched the following screenshot therefore the rungs are generally tight jointly to help you read the trading within a 5 minutes european graph or chart for any a long time relating

*1 445 forex trading icons free in svg png ico iconscout* - Apr 29 2023

web download 1 445 forex trading vector icons for commercial and personal use available for free or premium in line flat gradient isometric glyph color editor new svg to lottie lottie editor file converter iconscout api a step

**cynthia s color ribbon surfing system day trade forex com** - May 31 2023

web the color ribbon surfing system is a forex manual trading system specifically written for the mt4 trading platform and teaches how to trade between the major and minor key levels like banks and hedge funds trade because it gives such precise entry signals based on color and volatility cynthia s color ribbon surfing system can be used for

the color ribbon surfing system forex binary option trading - Feb 13 2022

web the color ribbon surfing system for forex binary option tradinglearn more here clika pe l 3411 36322 new 2021 updates the color ribbon surfing sys

**bollinger bands coloring in areas forex factory** - Sep 22 2022

web mar 18 2014 i m looking for an indicator that colors the area between the upper bollinger band and the median eg blue and between the lower and the median eg red is there thanks to all

*pdf forex color ribbon* - Aug 22 2022

web forex color ribbon industrial marketing oct 24 2020 buyers guide 86 aug 22 2020 official gazette of the united states patent and trademark office oct 16 2022 wall street technology aug 14 2022 catalog sep 03 2021 obso1escence feb 25 2021 in depth guide to price action trading mar 17 2020

[guidelines for dialog design hci w3computing com](#) - Feb 25 2022

web guidelines for dialog design hci dialog is the communication between the computer and a person well designed dialog makes it easier for people to use a computer and lessens

**dialog design online tutorials library** - Nov 05 2022

web jul 21 2013 strong designing strong strong interfaces strong strong and strong strong dialogues strong br notes br interaction

**13 designing interface and dialogue studylib net** - Mar 09 2023

web designing interfaces and dialogues in graphical environments dialogue design issues goal is to establish the sequence of displays that users will encounter when working with

**interface design and dialogues aydın adnan menderes university** - Jul 13 2023

dialog should speak the users language use words phrases and concepts familiarto the user rather than special system terms see more

**process of designing interfaces and dialogues analytical essay** - Apr 29 2022

web for interface and dialogue designs one additional subsection is included a section outlining the dialogue sequence the ways a user can move from one display to

[traditional dialogue design applied to modern user interfaces](#) - May 11 2023

dialogs come in two main types first type are attention seeking modal dialogs which force a user to interact with them before continuing modal see more

**chapter 11 designing interfaces and dialogues** - Jan 07 2023

web designing interfaces and dialogues cont figure 11 1 systems development life 5 deliverables and outcomes creation of a design specification a typical

**dialogue design an overview sciencedirect topics** - Feb 08 2023

web ciples for good dialogue design be cause they get excited about the additional possibilities inherent in modern user interfaces as the ex amples in this article show how ever

**dialog design free dialog design templates edraw software** - Oct 24 2021

web dialog design template a free customizable dialog design template is provided to download and print quickly get a head start when creating your own windows ui

**akt2163b lecture 11 interface and dialogue design youtube** - Aug 02 2022

web lecture 11 information systems analysis and design akt2163 b class the topic is interface and dialogue design

**visual design of interaction dialog or interface** - Sep 03 2022

web these are windows that and computer and interface as the sup intuitively a good word to appear on the screen as parts of a task porting software and hardware through describe

design of dialogues for human computer interaction - May 31 2022

web jan 1 1992 the chapter reports on work conducted in three phases in the first phase examples of implemented dialogues were analysed with regard to user needs and

the design and evaluation of dialogues for interactive voice - Mar 29 2022

web of the system interface that the caller will encounter to guide their interactions user guides and on line help may be available but the dialogue design is often key to a successful

**geocities ws** - Jan 27 2022

web interface design focuses on how information is provided to and captured from users dialogue design focuses on the sequencing of interface displays dialogues are

**interface and dialogue design secure4 khronos** - Nov 24 2021

web jun 18 2023 chapter 14 designing interfaces and dialogues additionally form and report design and interface and dialogue design have similar processes and deliverables

**outline interface design roadmap navigation and dialogue** - Jul 01 2022

web outline interface design roadmap navigation and dialogue static structure diagrams jsd diagram navigation and dialogue hci lecture 7 david aspinall informatics

**visual design of interaction dialog or interface researchgate** - Sep 22 2021

web jan 11 1995 this survey presents important concepts of interface management dialogue independence structural modeling representation interactive tools rapid prototyping

*modern systems analysis and design ch1 computer science* - Apr 10 2023

web dr samsun m baŞarici cse 414 systems analysis and design lecture 10 designing interfaces and dialogues learning objectives explain the process of designing

**chapter 11 designing interfaces and dialogues yumpu** - Dec 06 2022

web dialogue design the dialogue design process remains an art as well as a science from handbook of human computer interaction 1988 related terms ergonomics

**5 essential ux rules for dialog design** - Aug 14 2023

use dialogs sparingly because they are interruptive their sudden appearance forces users to stop their current task and focus on the dialog content for modal dialogs users have to deal with a in dialog action before continuing and are no longer able to access the page below sometimes this is a good thing such as see more

**user interface design wikipedia** - Oct 04 2022

web a dialog is the construction of interaction between two or more beings or systems in hci a dialog is studied at three levels lexical shape of icons actual keys pressed etc are

**chapter14 designing interfaces and dialogues slideshare** - Jun 12 2023

you shouldn t try to cram too much into a dialog keep it clean and simple follow the kiss principle but minimalist doesn t mean limited all information should be valuable and relevant see more

interactive design of web user interface adaptive display - Dec 26 2021

web may 12 2019 in the overall web user interface adaptive design including the most important two design elements namely human and interactive interface dialogue