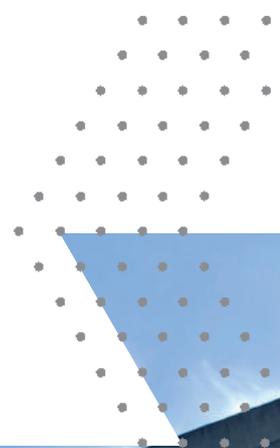




# LTC

## Optimal coordination of roadworks and events

MANAGEMENT | PLANNING | COMMUNICATION



- » Total insight in planning
- » Inclusion in route advice
- » Optimizing workflow
- » Clarifying reports
- » Multimedia Communications

andes

# LTC: The total solution for road authorities

Growing traffic volume poses a real challenge to road authorities. Infrastructural adjustments and increasingly more complex traffic regulations make guaranteeing accessibility, safety and liveability of towns and villages a tough task. There is often a demand for extra attention during temporary changes due to roadworks and heavily visited events. 'Local Traffic Control', especially developed for road authorities, helps with the necessary traffic management and essential measures to communicate information to road users, emergency services and residents.

## LOCAL TRAFFIC CONTROL

Local Traffic Control (LTC) is an online service designed to enter, manage, synchronise and publish information on roadworks and events. LTC makes it possible to share traffic and transport related information with all desired target groups. LTC is a country-wide system in which all road authorities can observe from each other which activities are planned and being implemented. LTC works on the basis of open standards and

can be linked to third party systems thus creating a total overview of activities on the roads at different (for example council, regional and national) levels. The information can be used in, for example, navigation systems, dispatch room systems and traffic models. Data distribution occurs real time, making the information immediately available for colleagues, public and professional road users. This way, LTC contributes to more efficient work processes and an optimal information provision.

## LTC: HOW DOES IT WORK?

The LTC product family allows you to plan and manage all roadworks and events in detail and inform stakeholders and the public in real time.

### « LTC Roadworks & Events

A user friendly interface where all roadworks and events can be entered, managed and synchronised.



## LTC ROADWORKS & EVENTS

LTC software is deployed as a hosted service (SaaS) and does not require local installation. The basis of the application is a large geographical map on which all planned roadworks and events, including any diversions in the area are shown clearly on all roads. Just a few clicks of the mouse are needed to import a new work or event. The import consists of text, icons and a selection of roads to indicate blocks and diversions.

If blocks or diversions are cross-border, and need to be imported on the network of another road authority, permission can be applied for immediately. This ensures an efficient synchronisation. Where regional synchronisation is in place, the input application can be set up so that import on so-appointed roads will always be approved by a central person who takes on the role of synchroniser. LTC offers far-reaching possibilities for the planning and management of roadworks including progress of projects and hindrances for various modalities and emergency services.

## OPTIMAL INFORMING

A great advantage of LTC is that the information only has to be entered once to subsequently be endlessly shared. LTC Publication and LTC EDP have been developed to make publication and export of information and data possible in a professional and efficient way. By means of an interactive map viewer in LTC Publication, an overview map is presented with detailed information on all activities. Given the increasing use

of smart phones, LTC Mobile has been developed, which optimises the information for mobile use.

LTC Publication is often used on public websites, information displays and on intranet for internal use. There are also separate viewers set up to inform professional parties such as Public Transport providers and dispatch rooms of emergency services. LTC further supports dynamic rerouting through route planners and sat-nav systems. LTC can also be connected to third party data warehouses, traffic models and every GIS application that can be thought of. That is what makes LTC an application which can be used for the optimal informing of any preferred target group.

### » LTC Publication

A web viewer allows the visitor to be fully informed about current planning of roadworks and events.



## ABOUT THE LTC DEVELOPER

Andes develops applications in the field of maps & mobility for professional and public organisations. Andes' specialities are: geographical networks, route planning and developer components for geographic and mobility solutions. By continually working on innovation, Andes adds value and makes software that is both advanced and user friendly.

# LTC Publication

The government is working hard at keeping people on the move. Being able to offer reliable travel information so that road users can travel more quickly, safely and efficiently from A to B is an increasingly important part of that. LTC Publication offers support to road authorities in their efforts to send road users well-informed on their way.

## PUBLICATION OF ROADWORKS AND EVENTS

The roadworks and events entered in LTC are presented in a clear and user friendly way via LTC Publication. This module has a standard template and is ready for immediate use on any website. The standard version consists of a navigable overview map showing all activities. It can be expanded to a veritable travel portal with various kinds of additional travel information, such as parking facilities and Public Transport. LTC Publication has a route planner standard at its disposal; not only for cars, but also for cyclists and pedestrians. The route planner calculates the optimal route, taking current roadworks and events into consideration.

## OVERVIEW MAP

The overview map, with detailed information of the activities, is presented with the help of an

interactive map viewer. This map keeps road users apprised of the predicted inconvenience so that they can adjust their travel plans where necessary. The overview map is most often used for public websites, but can also be serviceable on intranet and information displays. LTC Publication can be configured according to the user's own communication guidelines, for example by using a layout in the company style, by adding a banner, logo or crest, or adapting the colour scheme.

## ROUTE PLANNER

As well as the overview map, LTC Publication has at its disposal a route planner for cars, cyclists and pedestrians. This route planner is exceptional in that any blocks appearing on the route of the chosen modality, can be avoided. At the time of entering activities, the modalities likely to suffer inconvenience from the blocks can be indicated. In this way, not only are road users informed about

roadworks and events, but they also immediately receive alternative routes to the planned route. The viewer is supplied standard with the most up-to-date traffic information. In this way, LTC Publication helps the road user plan the very best route possible.

## LTC MOBILE

Developments in technology are ever progressing and use of mobile Internet is becoming more and more self-evident. Smart phone users have access to the most up-to-date information, everywhere and always. Increasingly more authorities are adjusting services and website accordingly. Andes is happy to join into this development, and has therefore adapted LTC to mobile use. Both road authorities' activities and traffic jam information are conveniently displayed on a map, with an indication of the expected delay. Besides an overview map, LTC Mobile has a route planner which takes imported blocks into consideration as well. LTC Mobile synchronises all entered activities and displays them immediately on the screen with an optimal rendering for smart phones.

For the use of LTC Mobile is no download or installation needed: a link just has to be activated once, and thereafter automatically updates. The user can see the location and cause of the activity,

and is immediately apprised of the extent of the inconvenience. Road authorities who have indicated a diversion, offer at the same time an alternative route on the up-loadable publication map. All this is fully optimised for mobile use. This means that the road user is aware of the up-to-date situation on the roads not only before the journey begins, but also during the journey, and at any stops. In short: the road user is well-informed on its way with LTC Mobile, everywhere and always.

### ✚ LTC Mobile

Access to most up-to-date travel information, anytime, anywhere with LTC Mobile.



### LTC PUBLICATION IN SHORT:

- » Overview of all current and planned roadworks and events
- » Display on map or aerial photo
- » Integrated route planner; for car drivers, cyclists and pedestrians
- » Alternative routing advice when roadworks occur on the planned route
- » Route planner shows traffic jams on the planned route

LTC Publication is often used on public websites, information displays and on intranet for internal use. There are also separate viewers set up to inform professional parties such as Public Transport providers and dispatch rooms of emergency services. LTC further supports dynamic rerouting through route planners and sat-nav systems. LTC can also be connected to third party data warehouses, traffic models and every GIS application that can be thought of. That is what makes LTC an application which can be used for the optimal informing of any preferred target group.

# LTC Export, Distribution & Print

With LTC, road authorities can easily manage the planning of roadworks and events and publish this information with LTC Publication and LTC Mobile. Road authorities however have to deal with more stakeholders and target groups which have a vested interest in correct and customised information about roadworks and events. In order to better cater to the often specific needs of these target groups, Andes has developed LTC Export, Distribution & Print (EDP).

## EDP: WHAT IS IT?

LTC EDP offers users the possibility to systemise (configure) all the information entered into LTC and then quite simply send or print it in the desired file format. That can be done once only, or periodically in a regular repeating pattern.

## EDP CONFIGURATION

LTC EDP consists of a number of simple steps which allows users to indicate which information should be used and in which way they wish to share it. It is possible to save configurations so that the same steps do not have to be taken on a following occasion. Instead of standard publication in the same format, it is now possible for the user to determine how the information will be shared with the different stakeholders.

## EDP EXPORT

LTC EDP makes it possible to export the configured set of data in various known formats, in a user friendly way. The user can choose from the following file formats: RTF (Word), PDF, XML, Excel and Shape. The file formats offered make it possible to include the selected information in GIS applications, newsletters and management reports.

## EDP DISTRIBUTION

LTC EDP contains an address book in which frequently recurring interested parties can be saved as contact persons. That makes it easier to send selected information once or periodically to a regular e-mail address group. The agenda-making function allows regular contact persons to always be informed at agreed times.

## EDP PRINT

With LTC EDP users can design overview maps in many different styles. For example, preferences in content, cut-out, caption, portrait or landscape, can all be set entirely according to the user's wishes. The map will be generated as a PDF file and can then be printed in various formats. The user can also save the map settings and even make an agenda so that the ideal overview map is automatically sent to interested parties.

« **LTC EDP**  
Activities can be shared in the following file formats: RTF (Word), PDF, Excel, Shape and XML.



# LTC Quality Center

An explosive growth in the amount of activities being entered into LTC make it sometimes difficult to maintain the overall picture and to guard the quality. This has led to an increasing number of road authorities feeling the need to get some grip on the quality of the entered data and the communication with users. The Quality Center has been developed to meet those needs.

## MANAGEMENT CONSOLE

The Management Console offers road authorities, or umbrella organisations which are responsible for accessibility of a region, management tools to control the entering of data in LTC. As well as monitoring, various overview reports can be generated which allow inspection of the use of LTC and the generated data. Automatic alerts can be sent, for example when the start or completion date is approaching. Sending a reminder can also be useful when it has been a while since a user last logged in. The Management Console makes it easy to keep an overview of LTC usage.

a way that only the texts for the general public are separately adapted while the source data or the geographical data imported into LTC remain unchanged.

## SUBCONTRACTOR'S PAGE

Subcontractors are an important target group for road authorities, with influence on the planning of roadworks and events. In order to improve the communication with subcontractors, the Subcontractor's page has been developed. The subcontracting organisations can use their 'own page' to amend features of the activities such as start or completion dates. Subcontractors can also confirm activities, suggest other data, add supplementary remarks and change contact persons. In this way, implementing organisations are optimally involved in the planning and realisation.

## EDITOR

Entering data in LTC often takes place by using technical language, which does not always communicate that well to the road users. Using the Editor, users can adapt the accompanying texts on roadworks to a more easily understood general public language. Moreover, the Editor is set up in such

- » Send alerts automatically to LTC users and contractors
- » Overview and statistics per user
- » Editorial module for consistent communication
- » Ideal for Region Control
- » Separate page for monitoring planning contractors
- » Improve quality of the entered data



# Optimal coordination of roadworks & events

MANAGEMENT | PLANNING | COMMUNICATION

A large number of road authorities already use LTC Roadworks & Events.  
Try the application out now, no strings attached, by asking for a login code.  
Please send your enquiry per email to: [ltc@andes.nl](mailto:ltc@andes.nl)



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