



Joint stock company  
«Research and design institute of urea  
and organic synthesis products»  
(JSC «NIIK»)

**Why  
NIIK IS THE BEST CHOICE  
when implementing world's  
technologies in Russia?**



# WHY NIIK IS ATTRACTIVE FOR FOREIGN LICENSORS ?

NIIK will help:

- to reduce the project implementation period
- enhance the performance of investments.
- to push up profit
- to attract new technologies to Russia



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# НИИК'S EXPERIENCE IN ADAPTATION OF FOREIGN LICENSOR'S TECHNOLOGIES



## **JSC «Cherepovetsky Azot» (Cherepovets, Russia)**

Ammonia unit, capacity 2200 t/d in cooperation with Mitsubishi Heavy Industries (Japan)

## **LLC Baltic Urea Plant (Leningrad region, Russia)**

Ammonia unit with capacity 3000 TPD, urea unit with capacity 3535 TPD in cooperation with Saipem SpA (Italy)

## **KuibyshevAzot (Togliatti, Russia)**

Ammonia unit, capacity 1340 TPD in cooperation with Linde AG (Germany)

## **Cherepovetsky Azot (Cherepovets, Russia)**

Urea unit, capacity 1500 TPD in cooperation with «Chemoproject Nitrogen AS» (Czech Republic)

## **NevAzot (EuroChem) (Nevinnomyssk, Russia)**

Melamine unit, capacity 50 000 TPY in cooperation with «Lurgi» (Germany)

## **JSC «Ammony» (Mendeleevsk, Tatarstan, Russia)**

Chemical complex Methanol/Ammonia/Urea in cooperation with Mitsubishi Heavy Industries (Japan)

## **TogliattiAzot (Togliatti, Russia)**

Urea unit, 2200 TPD in cooperation with Casale SA

## **JSC «Eurochem» (Novomoskovsk, Russia)**

Revamp of urea unit in cooperation with Casale SA

## **JSC «Azot» (Cherkassy, Ukraine)**

in cooperation with Casale SA

## **Salavatnefteorgsintez (Salavat, Russia)**

Urea granulation unit, capacity 1400 MTPD in cooperation with Toyo Engineering Corporation (Japan)

## **JSC «Schekinoazot» (Schekino, Russia)**

Hydrogen unit in cooperation with Haldor Topsoe A/S (Denmark)

## **CJSK «Korund-Cyan» (Dzerzhinsk, Russia)**

Sodium cyanide unit in cooperation with EPC (Germany)



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# ADVANTAGES OF COOPERATION BETWEEN FOREIGN LICENSOR AND NIIK FOR THE CUSTOMER

- Reduction of time and expenses for authority package development
- Development of environmental protection, industrial safety and fire fighting solutions
- Quick approval by State Expertise Committee

Control for documentation adaptation to Russian regulations at early project stages

- Civil design according to Russian conditions

Regional traditions for constructions and manufacturing of engineering structures are taken into account.

Foreign licensor submits:

License for technology

Basic engineering/basic design

Detailed engineering

Equipment procurement

At the battery limit of  
equipment  
procurement

!

**NO authority  
package**

Customer requests for:

Engineering and design, integration with the infrastructure

Documentation for approval

Building permit

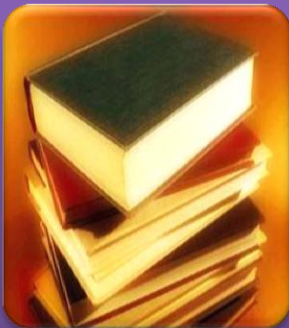
Detail design for construction

Compliance of import deliveries with Russian safety codes



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# WHAT PREVENTS FOREIGN LICENSOR FROM DEVELOPMENT OF AUTHORITY PACKAGE ON THEIR OWN?



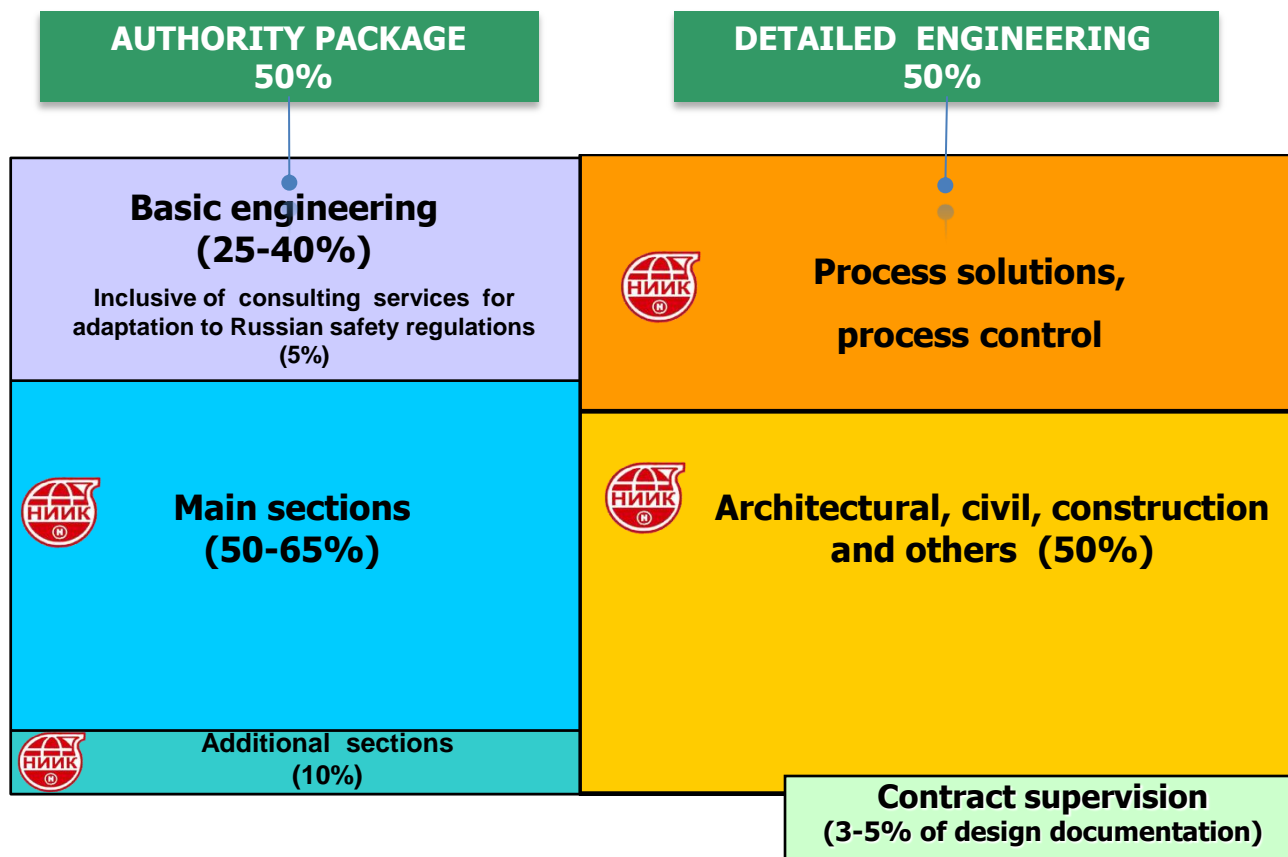
Bad knowledge of Russian norms and regulations



Peculiarities of authority package sections



# DESIGN DOCUMENTATION DEVELOPED BY NIIK BASED ON FEED-PACKAGE PROVIDED BY FOREIGN LICENSOR



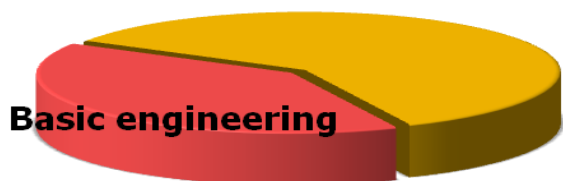
# AUTHORITY PACKAGE DEVELOPMENT

## Basic engineering

Plot plan (building arrangements, sites, pavements)
Architectural and civil solutions
Utilities
Process solutions

## Design documentation

### Extra sections



## Authority package

Plot plan; vertical leveling; earthworks table; site map etc	
Architectural and civil solutions; design and planning solutions; development of engineering structural drawings	
Utilities; Design of energy supply systems	
Process solutions	
Construction arrangement draft	<ul style="list-style-type: none"> <li>- Environmental protection</li> <li>- Reducing negative environmental impact</li> </ul>
Fire fighting system	Civil defense and industrial safety



# LICENSOR'S INVOLVEMENT IN AUTHORITY PACKAGE DEVELOPMENT



**To submit additional information**



**To perform and submit calculations and drawings required for design documentation development**



**To adapt design documentation to Russian norms and regulations, inclusive of revision of the documentation in accordance with State Expertise Committee's comments and wishes**



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# QUESTIONS WHICH MAY ARISE DURING DETAILED DESIGN DOCUMENTATION DEVELOPMENT



- Differences in construction norms
- Construction softwear should be certified by Rostehnadzor
- Separate sections of detailed design documentation should be approved by State Expertise Committee

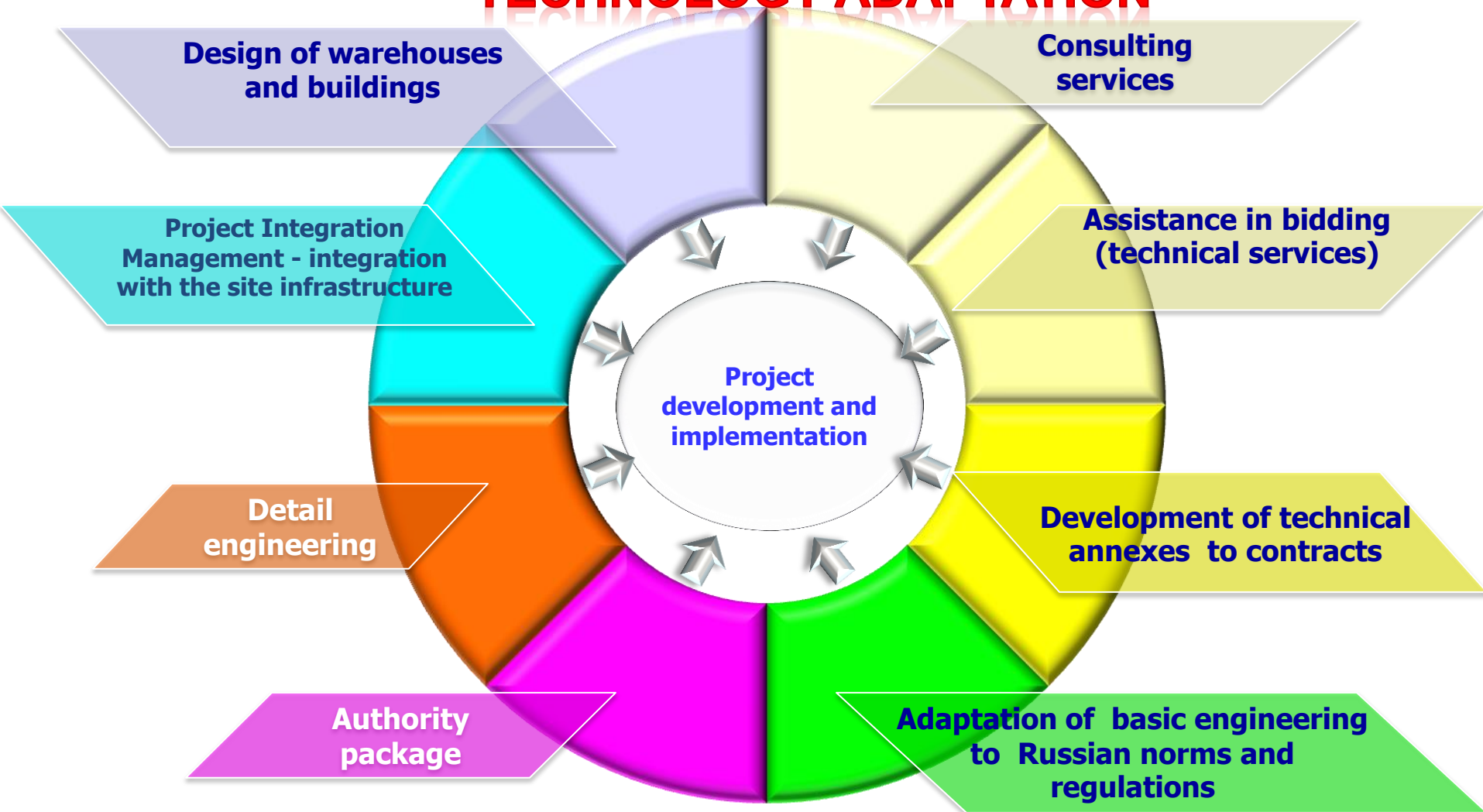
**Need in Russian  
engineering  
company for  
detailed  
engineering  
development**



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# НИК'S SERVICES FOR FOREIGN LICENSOR'S TECHNOLOGY ADAPTATION



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# THE BASICS OF SUCCESS WHEN IMPLEMENTING PROJECT IN RUSSIA

1. Involvement of a Russian engineering company (for authority package development, for process selection)
2. Foreign licensor's technology adaptation to Russian legislation (at all stages of the project cycle)
3. Common project schedule for all subcontractors
4. Direct communication between Licensor and Russian engineering company
5. Efficient information exchange between Licensor and Russian engineering company

