

## Occupational Coding in the RLMS Data Sets

In gathering information on respondents' employment, we followed the standard practice of asking about respondents' work in several different ways: the name of their profession or occupation; the name of their job or position (*dolzhnost*), which often includes information about workers' level of skill or responsibility; what duties they normally perform, etc. Their verbatim answers were put into a computer file as long string variables. With non-project funds, a computer program was developed which, functioning like a word processor thesaurus, proposed codes consistent with codes approved for similar answers in the past. However, we did not allow the computer program to assign codes automatically since the program might miss nuances in the answers. Rather, a coder was required to approve the proposed code.

Occupations were coded according to the four-digit International Standard Classification of Occupations: ISCO-88 (Geneva: International Labour Office, 1990). Considerable care was devoted to taking into account the idiosyncrasies of the Russian labor market. For example, *medsestra* is normally translated to mean "nurse." The ISCO classifies nurses as professionals and defines professionals as those involved in "increasing the existing stock of knowledge, applying scientific and artistic concepts and theories to the solution of problems, and teaching about the foregoing in a systematic manner. Most occupations in this major group require skills at the fourth ISCO skill level." Since Russian nurses do not normally function at this level and were never considered to be professionals in the former Soviet Union, they were classified at the level which the ISCO assigns to nurses' aides in the West.

The four-digit codes can be collapsed into one-, two-, or three-digit codes. The following list provides the one-digit codes. This does not, in our estimation, constitute a valid ordinal scale. For example, many professionals also perform secondary managerial functions and may have more authority over other employees than some people who are classified as managers. Crafts workers may well be more skilled, educated, and highly paid than some clerks.

- 1 Legislators, Senior Managers, Officials
- 2 Professionals
- 3 Technicians and Associate Professionals
- 4 Clerks
- 5 Service Workers and Market Workers
- 6 Skilled Agricultural and Fishery Workers
- 7 Craft and Related Trades
- 8 Plant and Machine Operators and Assemblers
- 9 Elementary (Unskilled) Occupations
- 0 Army

## ISCO Four-digit Occupation Codes

- 1110 Legislators
- 1120 Senior government officials
- 1130 Traditional chiefs and heads of villages
- 1141 Senior officials of political-party organizations; revolutionaries
- 1142 Senior officials of employers', workers' and other economic-interest organizations
- 1143 Senior officials of humanitarian and other special-interest organizations
- 1210 Directors and chief executives
- 1221 Production and operations department managers in agriculture, hunting, forestry and fishing
- 1222 Production and operations department managers in manufacturing
- 1223 Production and operations department managers in construction
- 1224 Production and operations department managers in wholesale and retail trade
- 1225 Production and operations department managers in restaurants and hotels
- 1226 Production and operations department managers in transport, storage and communications
- 1227 Production and operations department managers in business services
- 1228 Production and operations department managers in personal care, cleaning and related services
- 1229 Production and operations department managers not elsewhere classified
- 1231 Finance and administration department managers
- 1232 Personnel and industrial relations department managers
- 1233 Sales and marketing department managers
- 1234 Advertising and public relations department managers
- 1235 Supply and distribution department managers
- 1236 Computing services department managers
- 1237 Research and development department managers
- 1239 Other department managers not elsewhere classified
- 1299 Landowners; gentry (*pomeshchik*)
- 1311 General managers in agriculture, hunting, forestry and fishing
- 1312 General managers in manufacturing
- 1313 General managers in construction
- 1314 General managers in wholesale and retail trade
- 1315 Commandants (not military); administrator with higher or specialized secondary education
- 1316 General managers in transport, storage and communications
- 1317 General managers of business services
- 1318 General managers in personal care, cleaning and related services
- 1319 General managers not elsewhere classified
- 1510 Master with higher education; steward; bailiff (*prikazchik*)
- 1520 Landowner; *khoziain*; *edinolichnik*; building owner
- 1530 Coop owner
- 1540 *Dvorianin*; noblemen; *shliakhta*; prince; *statskii covetnik*
- 1550 Small business owner
- 1590 Other
- 2000 "Intelligentsia;" scientific worker, NEC
- 2111 Physicists and astronomers
- 2112 Meteorologists
- 2113 Chemists
- 2114 Geologists and geophysicists
- 2121 Mathematicians and related professionals

2122 Statisticians  
2131 Computer systems designers and analysts  
2132 Computer programmers  
2139 Computing professionals not elsewhere classified  
2141 Architects, town and traffic planners  
2142 Civil engineers  
2143 Electrical engineers  
2144 Electronics and telecommunications engineers  
2145 Mechanical engineers  
2146 Chemical engineers  
2147 Mining engineers, metallurgists and related professionals  
2148 Cartographers and surveyors  
2149 Architects, engineers and related professionals not elsewhere specified, engineers with higher education NEC  
2211 Biologists, botanists, zoologists and related professionals  
2212 Pharmacologists, pathologists and related professionals  
2213 Agronomists and related professionals  
2221 Medical doctors  
2222 Dentists  
2223 Veterinarians  
2224 Pharmacists  
2229 Health professionals (except nursing) not elsewhere classified (*medik* with higher education)  
2230 Nursing and midwifery professionals  
2300 Teachers with higher education  
2310 College, university and higher education teaching professionals (including *prepodanateli* in VUZ)  
2320 Secondary education teaching professionals; teachers (*uchitelia*)  
2331 Primary education teaching professionals  
2332 Pre-primary education teaching professionals  
2340 Special education teaching professionals  
2351 Education methods specialists  
2352 School inspectors  
2359 Other teaching professionals not elsewhere classified  
2411 Accountants  
2412 Personnel and careers professionals  
2419 Business professionals not elsewhere classified  
2421 Lawyers  
2422 Judges  
2429 Legal professionals not elsewhere classified  
2431 Archivists and curators  
2432 Librarians and related information professionals  
2400 Art critics  
2441 Economists  
2442 Sociologists, anthropologists and related professionals  
2443 Philosophers, historians and political scientists  
2444 Philologists, translators and interpreters  
2445 Psychologists  
2446 Social work professions  
2451 Authors, journalist and other writers  
2452 Sculptor, painters and related artists

2453 Composers, musicians and singers  
2454 Choreographers and dancers  
2455 Film, stage and related actors and directors  
2460 Religious professionals  
3111 Chemical, physical and science technicians  
3112 Civil engineering technicians  
3113 Electrical engineering technicians  
3114 Electronics and telecommunications engineering technicians  
3115 Mechanical engineering technicians  
3116 Chemical engineering technicians  
3117 Mining and metallurgic technicians  
3118 Draftsmen  
3119 Physical and engineering science technicians not elsewhere classified; engineers without higher education, NEC; lab workers  
3121 Computer assistants  
3122 Computer equipment operators  
3123 Industrial robot controllers  
3131 Photographers and image and sound recording equipment operators  
3132 Broadcasting and telecommunications equipment operators  
3133 Medical equipment operators  
3139 Optical and electronic equipment operators not elsewhere classified  
3141 Ships' engineers  
3142 Ships' deck officers and pilots  
3143 Aircraft pilots and related associate professionals  
3144 Air traffic controllers  
3145 Air traffic safety technicians  
3151 Building and fire inspectors  
3152 Safety, health and quality inspectors  
3211 Life science technicians  
3212 Agronomy and forestry technicians  
3213 Farming and forestry advisors  
3221 Medical assistants  
3222 Sanitarians  
3223 Dieticians and nutritionists  
3224 Optometrists and opticians  
3225 Dental assistants  
3226 Physiotherapists and related associate professionals  
3227 Veterinary assistants  
3228 Pharmaceutical assistants  
3229 Modern health associate professionals (except nursing) not elsewhere classified (*medik* with secondary education)  
3231 Nursing associate professionals; nurses without higher education, NEC  
3232 Midwifery associate professionals  
3241 Traditional medicine practitioners  
3242 Faith healers  
3310 Teachers with less than higher education  
3320 Pre-primary education teaching associate professionals  
3330 Special education teaching associate professionals  
3340 Other teaching associate professionals; vocational education masters  
3411 Securities and finance dealers and brokers  
3412 Insurance representatives

3413 Estate agents  
3414 Travel consultants and organizers  
3415 Technical and commercial sales representatives  
3416 Buyers; purchasing agent  
3417 Appraisers and auctioneers  
3419 Finance and sales associate professionals not elsewhere classified  
3421 Trade brokers  
3422 Clearing and forwarding agents  
3423 Employment agents and labor contractors  
3429 Business services agents and trade brokers not elsewhere classified  
3431 Administrative secretaries and related associate professionals  
3432 Legal and related business associate professionals  
3433 Bookkeepers  
3434 Statistical, mathematical and related associate professionals  
3439 Administrative associate professionals not elsewhere classified  
3441 Customs and border inspectors  
3442 Government tax and excise officials  
3443 Government social benefits officials  
3444 Government licensing officials  
3449 Customs, tax and related government associate professionals not elsewhere classified  
3450 Police inspectors and detectives  
3460 Social work associate professionals  
3471 Decorators and professional designers  
3472 Radio, television and other announcers  
3473 Street, night-club and related musicians, singers and dancers  
3474 Clowns magicians, acrobats and related associate professionals  
3475 Athletes, sports persons and related associate professionals  
3479 Artistic directors (*khudruk*); cultural-educational workers  
3480 Religious associate professionals  
4000 *Sluzhashchie* (non-manual workers, often implies specialized education)  
4111 Stenographers and typists  
4112 Word-processor and related operators  
4113 Data entry operators  
4114 Calculating machine operators  
4115 Secretaries  
4121 Accounting and bookkeeping clerks  
4122 Statistical and finance clerks  
4131 Stock clerks  
4132 Production clerks  
4133 Transport clerks  
4141 Library and filing clerks  
4142 Mail carriers and sorting clerks  
4143 Coding, proof-reading and related clerks  
4144 Scribes and related workers  
4190 Other office clerks  
4211 Cashiers and ticket clerks  
4212 Tellers and other counter clerks  
4213 Bookmakers and croupiers  
4214 Pawnbrokers and money-lenders  
4215 Debt-collectors and related workers  
4221 Travel agency and related clerks

4222 Receptionists and information clerks  
4223 Telephone switchboard operators  
5100 Servants  
5111 Travel attendants and travel stewards  
5112 Transport conductors  
5113 Travel guides  
5121 Housekeepers and related workers  
5122 Cooks  
5123 Waiters, waitresses and bartenders  
5131 Child-care workers  
5132 Institution-based personal care workers  
5133 Home-based personal care workers  
5139 Personal care and related workers not elsewhere classified  
5141 Hairdressers, barbers, beauticians and related workers  
5142 Companions and valets  
5143 Undertakers and embalmers  
5149 Other personal services workers not elsewhere classified  
5151 Astrologers and related workers  
5152 Fortune-tellers, palmists and related workers  
5161 Fire-fighters  
5162 Police officers  
5163 Prison guards  
5169 Protective services workers not elsewhere classified  
5210 Fashion and other models  
5220 Shop salespersons and demonstrators  
5230 Stall and market salespersons  
6111 Field crop and vegetable growers  
6112 Tree and shrub crop growers  
6113 Gardeners, horticultural and nursery growers  
6114 Mixed-crop growers  
6121 Dairy and livestock producers  
6122 Poultry producers  
6123 Apiarists and sericulturists  
6124 Mixed-animal producers  
6129 Market-oriented animal producers and related workers not elsewhere classified  
6130 Market-oriented crop and animal producers  
6141 Forestry workers and loggers  
6142 Charcoal burners and related workers  
6151 Aquatic-life cultivation workers  
6152 Inland and coastal waters fishery workers  
6153 Deep-sea fishery workers  
6154 Hunters and trappers  
6210 Subsistence agricultural and fishery workers  
7000 Masters; brigadiers NEC (not in agriculture)  
7100 Construction workers NECX  
7111 Miners and quarry workers  
7112 Shot firers and blasters  
7113 Stone-splitters, cutters and carvers  
7121 Builders, traditional materials  
7122 Bricklayers and stonemasons  
7123 Concrete placers, concrete finishers and related workers

7124 Carpenters and joiners  
7129 Building frame and related trades workers not elsewhere classified; *prorab* (construction superintendents)  
7131 Roofers  
7132 Floor layers and tile setters  
7133 Plasterers  
7134 Insulation workers  
7135 Glaziers  
7136 Plumbers and pipe fitters  
7137 Building and related electricians  
7139 *Germetchik* and other workers in the final stages of construction  
7141 Painters and related workers  
7142 Varnishers and related painters  
7143 Building structure cleaners  
7211 Metal molders and coremakers  
7212 Welders and flame cutters  
7213 Sheet-metal workers  
7214 Structural-metal preparers and erectors  
7215 Riggers and cable-splicers  
7216 Underwater workers  
7221 Blacksmiths, hammer-smiths and forging-press workers  
7222 Tool-makers and related workers  
7223 *Tokar* (7213, lathe operator)  
7224 *Shlifovshchitsa* (grinder/polisher)  
7231 *Mekhanik* (mechanic)  
7232 Aircraft engine mechanics and fitters  
7233 Agricultural- or industrial-machinery mechanics and fitters  
7241 *Slesar* (locksmith)  
7242 Electronics fitters  
7243 Electronics mechanics and servicers  
7244 Telegraph and telephone installers and servicers  
7245 Electrical line installers, repairer and cable jointers  
7311 Precision-instrument makers and repairers  
7312 Musical-instrument makers and tuners  
7313 Jewelry and precious-metal workers  
7321 Abrasive wheel formers, potters and related workers  
7322 Glass-makers, cutters, grinders and finishers  
7323 Glass engravers and etchers  
7324 Glass, ceramics and related decorative painters  
7331 Handicraft workers in wood and related materials  
7332 Handicraft workers in textile, leather and related materials  
7341 Compositors, typesetter and related workers  
7342 Stereotypers and electrotypers  
7343 Printing engravers and etchers  
7344 Photographic and related workers  
7345 Bookbinders and related workers  
7346 Silk-screen, block and textile printers  
7411 Butchers, fishmongers and related food preparers  
7412 Bakers, pastry-cooks and confectionery makers  
7413 Dairy-product makers  
7414 Fruit, vegetable and related preservers

7415 Food and beverage tasters and graders  
7416 Tobacco preparers and tobacco products makers  
7421 Wood workers; coopers (cask makers)  
7422 Cabinet-makers and related workers  
7423 Woodworking-machine setters and setter-operators  
7424 Basketry weavers, brush makers and related workers  
7431 Fiber-preparers  
7432 Weavers, knitters and related workers  
7433 Tailors, dressmakers and hatters  
7434 Furriers and related workers  
7435 Textile, leather and related pattern-makers and cutters  
7436 Sewers, embroiderers and related workers  
7437 Upholsterers and related workers  
7441 Pelt dressers, tanners and fellmongers  
7442 Shoe-makers and related workers  
8000 Masters; brigadiers in plants and factories; skilled factory workers NEC  
8111 Mining-plant operators  
8112 Mineral-ore- and stone-processing-plant operators  
8113 Well drillers and borers and related workers  
8121 Ore and metal furnace operators  
8122 Metal smelters, casters, and rolling-mill operators  
8123 Metal-heat-treating-plant operators  
8124 Metal drawers and extruders  
8131 Glass and ceramics kiln and related machine operators  
8139 Glass, ceramics and related plant operators not elsewhere classified  
8141 Wood-processing-plant operators  
8142 Paper-pulp-plant operators  
8143 Papermaking plant operators  
8151 Crushing-, grinding- and chemical-mixing-machinery operators  
8152 Chemical-heat-treating-plant operators  
8153 Chemical-filtering- and separating-equipment operators  
8154 Chemical-still and reactor operators (except petroleum and natural gas)  
8155 Petroleum- and natural-gas-refining-plant operators  
8159 Chemical-processing-plant operators not elsewhere classified  
8161 Power-production-plant operators  
8162 Steam-engine and boiler operators  
8163 Incinerator, water-treatment and related plant operators  
8171 Automated-assembly-line operators  
8172 Industrial-robot operators  
8211 Machine-tool operators (rotary milling)  
8212 Cement and other mineral products machine operators  
8221 Pharmaceutical- and toiletry-products machine operators  
8222 Ammunition- and explosive-products machine operators  
8223 Metal finishing-, plating- and coating-machine operators  
8224 Photographic-products machine operators  
8229 Chemical-products machine operators not elsewhere classified  
8231 Rubber-products machine operators  
8232 Plastic-products machine operators  
8240 Wood-products machine operators  
8251 Printing-machine operators  
8252 Bookbinding-machine operators

8253 Paper-products machine operators  
8261 Fibre-preparing-, spinning- and winding-machine operators  
8262 Weaving- and knitting-machine operators  
8263 Sewing-machine operators  
8264 Bleaching-, dyeing- and cleaning-machine operators  
8265 Fur- and leather-preparing-machine operators  
8266 Shoemaking- and related machine operators  
8269 Textile-, fur- and leather-products machine operators not elsewhere classified  
8271 Meat- and fish-processing-machine operators  
8272 Dairy-products machine operators  
8273 Grain- and spice-milling-machine operators  
8274 Baked-goods, cereal and chocolate-products machine operators  
8275 Fruit-, vegetable- and nut-processing-machine operators  
8276 Sugar production machine operators  
8277 Tea-, coffee- and cocoa-processing-machine operators  
8278 Brewers', wine- and other beverage-machine operators  
8279 Tobacco production machine operators  
8281 Mechanical-machinery assemblers  
8282 Electrical-equipment assemblers  
8283 Electronic-equipment assemblers  
8284 Metal-, rubber- and plastic-products assemblers  
8285 Wood and related products assemblers  
8286 Paperboard, textile and related products assemblers  
8290 Other machine operators and assemblers  
8311 Locomotive-engine drivers  
8312 Railway brakemen, signalmen, and switchmen  
8320 Drivers not specified  
8321 Motor-cycle drivers  
8322 Car, taxi and van drivers  
8323 Bus and tram drivers  
8324 Heavy truck and lorry drivers  
8329 Drivers, not further specified (not an official ILO code)  
8331 Motorized farm and forestry plant operators  
8332 Earth-moving- and related plant operators  
8333 Crane, hoist and related plant operators  
8334 Lifting-truck operators  
8340 Ships' deck crews and related workers  
9111 Street food vendors  
9112 Street vendors, non-food products  
9113 Door-to-door and telephone salespersons  
9120 Shoe cleaning and other street services elementary occupations  
9131 Domestic helpers and cleaners  
9132 Helpers and cleaners in offices, hotels and other establishments  
9133 Hand-laundrers and pressers  
9141 Building caretakers  
9142 Vehicle, window and related cleaners  
9151 Messengers, package and luggage porters and deliverers  
9152 Doorkeepers, watchpersons and related workers  
9153 Vending-machine money collectors, meter readers and related workers  
9161 Garbage collectors  
9162 Sweepers and related laborers

9211 Farm-hands and laborers; *dekkhanin; kolkhoznik; kpest'ianin; doyarka; teliatnitsa; vinarka; pastukh; chaban; polevod; osemenitel*  
9212 Forestry laborers  
9213 Fishery, hunting and trapping laborers  
9311 Mining and quarrying laborers  
9312 Construction and maintenance laborers: roads, dams and similar constructions  
9313 Building construction laborers  
9321 Assembling laborers  
9322 Hand packers and other manufacturing laborers  
9329 Unskilled workers, NEC  
9331 Hand or pedal vehicle drivers  
9332 Drivers of animal-drawn vehicles and machinery  
9333 Freight handlers  
0110 Armed forces