
Social Security Administration

WORKING PAPER

Social Security Administration's Legal, Program, and Technical/Data Occupational Information Requirements

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This working paper was prepared by staff of the Social Security Administration’s Office of Program Development and Research, Office of Retirement and Disability Policy for the Occupational Information Development Advisory Panel.

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This document provides an overview of the legal, program, and technical/data requirements that must be satisfied when the Social Security Administration (SSA) develops a new occupational information system (OIS) tailored for use in its disability programs.

A. Legal and Policy Requirements

Sections 223(d)(1)(A) and (d)(2)(A) of the Social Security Act compel SSA to rely on occupational information in the adult disability determination process. Following numerous judicial challenges in the early 1960’s,¹ SSA started consulting government occupational resources routinely. So began SSA’s reliance on the Department of Labor’s (DOL) Dictionary of Occupational Titles (DOT). Additional background regarding SSA’s use of the DOT can be found in *Use of the Dictionary of Occupational Titles in SSA’s Disability Programs* (SSA, 2008).

Briefly, any occupational resources that SSA uses must meet *at least* the three criteria described below. SSA’s use of alternative occupational resources that do not meet these criteria would require revisions to the Social Security Act, at a minimum.

1. Must Reflect National Existence and Incidence of Work

The statute states:

SSA shall find an individual to be disabled only if his/her impairment(s) is so severe that he/she “is not only unable to do...previous work, but cannot considering...work experience, engage in any other substantial gainful activity” (Section 223(d)(2)(A)).

- SSA must consider the claimant’s age, education, and work experience to determine if he/she can “engage in any other substantial gainful activity” that “exists in the national economy”(Section 223(d)(2)(A)).

¹ See, for example, *Kerner v. Fleming* (2nd Circuit, 1960) and *Rinaldi v. Ribicoff* (2nd Circuit, 1962).

- The term “work which exists in the national economy’ means work which exists in significant numbers either in the region where the individual lives, or in several other regions of the country” (Section 223(d)(2)(A)).

Therefore, a new occupational resource must show that the work exists and that the work exists in numbers sufficient to indicate that it is not obscure.

2. *Must Reflect Work Requirements*

The statute states...

- Disability is defined as the “inability to engage in substantial gainful activity by reason of a medically determinable physical or mental impairment...” (Section 223(d)(1)(A)).
- SSA shall find an individual to be disabled only if his/her impairment(s) is so severe that he/she “is not only unable to do...previous work, but cannot considering age, education, and work experience, engage in any other substantial gainful activity” (Section 223(d)(2)(A)).
- It does not matter “whether such work exists in the immediate area in which [the claimant] lives, whether a specific job vacancy exists...or whether [the individual] would be hired if [he/she] applied for work” (Section 223(d)(2)(A)).

Of particular relevance, if as a result of impairment the individual is unable, based on his or her *residual functional capacity*, to perform the activities required on his or her previous occupation, then factors such as his or her age, education, past work experience, and *residual functional capacity* must be considered in order to determine whether he or she can still perform other work that exists in the economy².

Therefore, the occupational resource must provide the data SSA needs in order to evaluate the individual’s capacity and qualifications to *perform* work as it currently exists in the economy, rather than to actually *obtain* work. As such, the resource must report occupational information that is both current, as well as aggregated, described, and rated in a manner that enables SSA to compare the work requirements of occupations to the individual’s ability to perform work despite the individual’s limitations resulting from a severe impairment(s).

² See *Villa v. Sullivan* (895 F.2d 1019, 5th Cir. 1990).

3. *Must Be Legally Defensible*

Section 223(d)(2)(A) was added to the Act in 1967 to address judicial³ and legislative⁴ concerns regarding SSA's burden of proof and consistency in making disability determinations or decisions in cases for which both medical and non-medical factors must be considered. This section of the statute has long been construed to mean that SSA has a burden of proof⁵ regarding its determination or decision that an individual has the ability to work despite a severe medical impairment. SSA must show "what the [individual] can do"⁶ and that the individual is "actually—not theoretically—capable of doing some kind of work"⁷ that currently exists in the economy. Therefore, any alternative occupational resource must be legally defensible for SSA to use it to meet its burden of proof,⁸ and it must be appropriately validated for use in SSA's disability processes.

Admittedly, the DOT is imperfect, and its limitations do not stem simply from the fact that its last major update occurred nearly 20 years ago. That is, although DOT does not suffer from reliance on an overly-abstract occupational title taxonomy, it does share many of the remaining concerns that were cited by SSA⁹ as reasons for not adopting the O*NET system developed by DOL to replace the DOT (particularly, a reliance on single-item "holistic" rating scales to assess abstract job demands and worker-attribute requirements).

However, SSA's uses of DOT – including the "vocational grid" decision making rules derived from the its ratings of general work demands and worker requirements – have been repeatedly tested judicially and upheld upon appeal,¹⁰ albeit not without caveats (e.g., in one case¹¹ it was noted that "the Court sustained the Grid as a useful though imperfect way to carry on an almost impossibly difficult task"). Accordingly, any changes in SSA's occupational resources would draw close scrutiny and likely challenge by monitoring authorities, advocates, claimant representatives, and judicial entities.

Because SSA's regulations and rulings regarding the assessment of adult residual functional capacity¹² and the ability to perform past and other work¹³ are based on DOT

³ See *Kerner v. Fleming* (2nd Circuit, 1960) and *Rinaldi v. Ribicoff* (2nd Circuit, 1962).

⁴ See Harrison Subcommittee Report, *Preliminary Report to the Committee on Ways and Means* (U.S. House of Representatives, 1960), pp. 17-20.

⁵ See *Bowen v. Yuckert* (Social Security Ruling (SSR) 88-3c).

⁶ *Kerner v. Fleming* (2nd Circuit, 1960).

⁷ Committee on the Ways and Means, *Staff Report on the Disability Insurance Program* (U.S. House of Representatives, 1974), p. 45.

⁸ Courts require expert testimony (and the data and methods used) to meet specific standards. *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and *Kumho Tire Co. v. Carmichael*, ___ U.S. ___, No. 97-1709, Slip op. at 11, 67 USLW 4179, 4183 (March 23, 1999).

⁹ See *SSA Concerns Regarding O*NET* (2009).

¹⁰ See *Taylor v. Schweiker* (SSR 82-47c) and *Campbell vs. Heckler* (SSR 83-46c).

¹¹ See *Johnson v. Heckler* (7th Circuit, 1985).

¹² See 20 CFR 404.1545 and 416.945. Also, see Attachment for relevant Social Security Rulings.

constructs, SSA would not need to revise its statute if it begins to use an alternative occupational resources not based on the data and constructs of the most recent version of DOT (provided that it meets the criteria cited above). However, the use of such an alternative source of occupational information would require SSA to revise relevant regulations and rulings, at a minimum.

B. Data and Technical Requirements for the OIS

From an overall design standpoint, SSA requires an OIS to replace DOT that:

1. Describes work using an occupational-title taxonomy that defines occupations at a level of granularity that is sufficiently detailed to minimize within-title differences on the rated attributes, such that a given title accurately describes both the major job activities and worker requirements for all who perform it, and avoids the presence of sub-occupations that differ meaningfully in terms of their major work activities or worker qualifications (e.g., as may be seen for entry-level versus journeyman titles);
2. Describes occupations in terms of a common profile of work attributes that comprehensively spans the “job side” domain of work activities and demands relevant to disability evaluation, vocational rehabilitation, and job placement for individuals with disabilities (i.e., a hierarchy of elements describing work, in which the rating process originates by describing job characteristics that are specific enough to be objectively rated and documented, and from which scores on more behaviorally abstract work dimensions can be estimated using a “decomposed judgment” measurement strategy, culminating in dimensions comparable in abstraction to the Data, People, and Things constructs developed by Sidney Fine and used in the DOT);
3. Describes occupations using a common profile of worker attributes that comprehensively spans the “person side” domain of individual-differences constructs and characteristics that the worker brings to the job situation and that are relevant to disability evaluation, vocational rehabilitation, and job placement for individuals with disabilities (i.e., a hierarchy of elements, varying in specificity from relatively detailed skills and educational requirements through abstract ability traits, that define personal characteristics that can be readily associated with medical evidence of human function, standardized physiological or psychological

¹³ See 20 CFR 404.1560 through 404.1569a and 416.960 through 416.969a, as well as 20 CFR Part 404, Subpart P, Appendix 2, section 200.00 through 204.00. Also, see Attachment for relevant Social Security Rulings.

assessment tests, or other data that can be collected during the disability adjudication process); and,

4. Uses data collection, sampling, and validation methods that are sufficient to (a) keep the above database of work activities/demands and worker-attribute requirements (and associated taxonomy of occupational titles) current as jobs change over time, (b) provide adequate empirical documentation of inter-rater agreement and ratings accuracy (i.e., for ratings of observable/objective work characteristics and worker requirements) and validity (in the case of ratings that are inferred or derived, particularly specifications of abstract worker-trait requirements), and (c) comprehensively describe the degree to which occupations exist in the entire economy (with particular emphasis on SSA's need to document that a given occupation exists in significant numbers, either in the region where the claimant lives or in multiple other regions of the country).

Specifically, SSA has identified the following requirements for this occupational information system and database:

1. *Classification System:* The numbering system for the occupational classification taxonomy must correspond to the Standard Occupational Classification (SOC) System, which the Office of Management and Budget requires all Federal statistical agencies to use to classify workers into occupational categories for the purpose of collecting, calculating, or disseminating data. However, the classification of occupations for the OIS must be structured at a more detailed level (e.g., so that OIS occupations subdivide the SOC classifications). In addition, the OIS requires a crosswalk from the OIS classification to other classification systems. (NOTE: SSA may investigate the use of other classification options, such as those that capture occupational tasks/sub-tasks and core functions for work rather than assign a finite number of discrete occupational titles, see 2 and 3 below).
2. *Occupationally Specific Data:* The level of aggregation of occupations must be granular enough to capture information specific to an occupation wherein the ratings for key work-activity/demands and worker-trait requirement constructs are similar (i.e., homogeneous). In addition, the level of aggregation of occupations must be high enough to be manageable in terms of measurement, data collection, and the utility of the occupational classification system.
3. *Core Tasks:* Occupations must be described in terms of core tasks and required work activities and contextual characteristics. This means that only core tasks should be included in occupational task lists or that, if other than core tasks are included in the occupational description, they must be shown as optional tasks. In addition, the levels of the measures of

job demands and required vocational profiles must be based only on performance of core tasks.

4. *Minimum levels of requirements needed for work:* The measures of the requirements of work must reflect the minimum levels necessary to perform the core tasks of a given occupation at a satisfactory level. If consideration is given with respect to the capacity of core tasks to be performed via reasonable accommodation (see 12 below), measures of minimum worker requirements should be specified with respect to both the standard activities, and activities that reflect reasonable accommodations.
5. *Observable Measures:* The constructs must be objectively measurable, and any elements for which data are collected via direct rating must be capable of being validated through direct observation. For example, a physical job demand such as “walking” must be measured and reported in functional terms that are relevant to an assessment of an individual’s ability (residual functional capacity) to meet the minimum requirements of the demand (e.g., the minimum amount of distance and frequency required for the occupation). Past research shows that the development of accurate operational definitions for these constructs is critical to this process, both in the physical domain as well as with respect to interpersonal and cognitive demands of jobs.
6. *Deconstructed Measures:* The data elements that represent higher levels of abstraction (i.e., constructs) must be defined or estimated in terms of multiple, more-specific rated elements for each occupation in order to enable accurate and reliable measurement, and to allow users to relate the more abstract work- and worker-trait construct requirements to more detailed, objective medical information and measures of human function. Direct ratings of global or theoretical constructs should be avoided in all cases. Composite constructs must be capable of being deconstructed into verifiable ratings of individual, more-specific characteristics (e.g., scores on an abstract characteristic like the DOT composite occupational strength construct, describing jobs in terms of having sedentary, light, medium, heavy and very heavy work demands, must be clearly linked back to verifiable ratings of objective work activities or demands).
7. *Number of constructs:* The number of constructs developed for this occupational system must be sufficient to reflect the job demands and vocational factors most relevant to disability adjudication and vocational rehabilitation, but must not be so numerous as to be burdensome to adjudicators or practitioners with respect to the numbers of elements that they must deal with or collect directly when making evaluations.
8. *Sampling methodology* must be sufficient to capture the full range of skill levels of work in the U.S. Economy.

9. *Inter-rater agreement levels* for all data collection processes must be sufficiently high to justify an inference of high data quality. Given that all ratings in both the DOT and the OIS to be used as its replacement are *level sensitive* by definition, reported measures of inter-rater agreement or consensus must be sensitive to both the relative rank-ordering of rated values produced by different raters across a profile of rated elements, as well as to the degree of level-based agreement between raters (e.g., measures based on absolute deviations between raters). Agreement indices such as the average inter-rater correlation (either computed individually, or especially, between mean profiles of ratings produced by different groups of raters), the intra-class correlation, or *rwg* are unsuitable due to the fact that they may produce numerical indices of agreement that appear to be adequate (e.g., correlation-based values > .70), even when unacceptable levels of rater disagreement are present. In no case will inter-rater agreement results (even using indices that are level-sensitive) be viewed as providing evidence of the *validity* of direct holistic ratings of abstract work or worker-trait characteristics.
10. *Data collection plans* must rely on methods that ensure reliable, accurate, and comprehensive results (plans should include onsite job analyses), and that focus on collecting data from raters who are demonstrably instrument-proficient and adequately motivated to rate accurately. Collection of ratings from job incumbents (trained or otherwise) should be avoided due to research indicating that they produce results having much lower levels of inter-rater agreement than trained analysts.
11. *Data must be valid, accurate, and reproducible.* All analytic methods should be validated by empirical methods. Specifications of abstract worker-trait requirements must have supporting empirical evidence to justify an inference of validity (e.g., being formed via decomposed-judgment strategies, in the case of abstract work activities, or via criterion-related or job-component validation methods in the case of abstract worker-ability requirements).
12. *Accommodations and job restructuring:* Potential opportunities for accommodations and job restructuring for occupational core tasks should be identified when both of the following apply: a) the type of accommodation or job restructuring is possible in a significant number of occupations nationally (e.g., for occupations within a given industry); and b) the type of accommodation or job restructuring is possible for the occupation as it is generally performed throughout the nation. That is, the OIS will not include highly customized accommodations or job restructuring that are specific to a given employer, to a specific individual, a specific impairment, or to tasks that are not occupational core tasks.
13. *The terminology and operational definitions* developed must be consistent with standard medical practice.

Attachment

Relevant Social Security Rulings

SSR 00-4p: Titles II and XVI: Use of Vocational Expert and Vocational Specialist Evidence, and Other Reliable Occupational Information in Disability Decisions

SSR 00-1c: Sections 222(C) and 223(A), (D)(2)(A), and (E)(1) of the Social Security Act (42 U.S.C. 422(C) and 423(A), (D)(2)(a), and (E)(1)) Disability Insurance Benefits -- Claims Filed Under Both the Social Security Act and the Americans With Disabilities Act

SSR 99-3p: Policy Interpretation Ruling. Title XVI: Evaluation of Disability and Blindness in Initial Claims for Individuals Age 65 or Older

SSR 96-9p: Policy Interpretation Ruling. Titles II and XVI: Determining Capability to DO Other Work -- Implications of a Residual Functional Capacity for Less Than a Full Range of Sedentary Work

SSR 96-8p: Policy Interpretation Ruling. Titles II and XVI: Assessing Residual Functional Capacity in Initial Claims

SSR 96-4p: Policy Interpretation Ruling. Titles II and XVI: Symptoms, Medically Determinable Physical and Mental Impairments, and Exertional and Nonexertional Limitations

SSR 88-3c: Sections 223(d) and 1614(a)(3) of the Social Security Act (42 U.S.C. 423(d) and 1382c(a)(3)) Disability—Validity of the Severity of Impairment Regulation

SSR 87-19c: Section 223(d) of the Social Security Act (42 U.S.C. 423(d)) Disability Insurance Benefits -- Evaluation of Claimant's Subjective Complaints and Credibility -- Applicability of the Medical-Vocational Guidelines

SSR 87-11c: Sections 205(g) and 223(d) of the Social Security Act (42 U.S.C. 405(g) and 423(g)). Disability -- Loss of Use of Limb Prevents Performance of Past Work -- "Employability" Immaterial in Determining Ability to Do Other Work

SSR 86-8: Titles II and XVI: The Sequential Evaluation Process

SSR 85-16: Titles II and XVI: Residual Functional Capacity for Mental Impairments

SSR 85-15: Titles II and XVI: Capability to Do Other Work -- The Medical-Vocational Rules as a Framework for Evaluating Solely Nonexertional Impairments

SSR 83-46c: Sections 216(i) and 223(d) (42 U.S.C. 416(i) and 423 (d)) Disability Insurance Benefits -- Inability to Perform Previous Work -- Administrative Notice Under the Medical-Vocational Guidelines of the Existence of Other Work.

SSR 83-14: Titles II and XVI: Capability to Do Other Work -- The Medical Vocational Rules as a Framework for Evaluating a Combination of Exertional and Nonexertional Impairments.

SSR 83-12: Titles II and XVI: Capability to Do Other Work -- The Medical Vocational Rules as a Framework for Evaluating Exertional Limitations Within a Range of Work or Between Ranges of Work.

SSR 83-11: Titles II and XVI: Capability to Do Other Work -- The Exertionally Based Medical-Vocational Rules Met.

SSR 83-10: Titles II and XVI: Determining Capability to Do Other Work -- The Medical-Vocational Rules of Appendix 2.

SSR 82-63: Titles II and XVI: Medical-Vocational Profiles Showing an Inability to Make an Adjustment to Other Work.

SSR 82-62: Titles II and XVI: A Disability Claimant's Capacity to Do Past Relevant Work, In General.

SSR 82-61: Titles II and XVI: Past Relevant Work -- The Particular Job or the Occupation as Generally Performed.

SSR 82-47c: Sections 216(i) and 223(d) (42 U.S.C. 416(i) and 423(d)) Disability Insurance Benefits -- Ability to Perform Sedentary Work -- Constitutionality of the Medical-Vocational Guidelines

SSR 82-46c: Sections 223(d) and 1614(a)(3) (42 U.S.C. 423(d) and 1382c(a)(3)) Disability -- Age Criterion of the Vocational Factors Regulations -- Use of Chronological Age -- Constitutionality.

SSR 82-41: Titles II and XVI: Work Skills and Their Transferability as Intended by the Expanded Vocational Factors Regulations Effective February 26, 1979.

SSR 82-40: Titles II and XVI: The Vocational Relevance of the Past Work Performed in a Foreign Country

SSR 82-36c: Sections 216(i) and 223(d) [42 U.S.C. 416(i) and 423(d)] Disability Insurance Benefits -- Inability to Perform Previous Work -- Existence of Other Performable Work.

SSR 82-35c: Sections 216(i) and 223(d) [42 U.S.C. 416(i) and 423(d)] Disability Insurance Benefits -- Inability to Perform Previous Work -- Existence of Unskilled Sedentary Jobs.

SSR 82-34c: Sections 216(i) and 223 (d) [42 U.S.C. 416(i) and 423(d)] Disability Insurance Benefits -- Inability to Perform Previous Work -- Administrative Notice of the Existence of Other Work.